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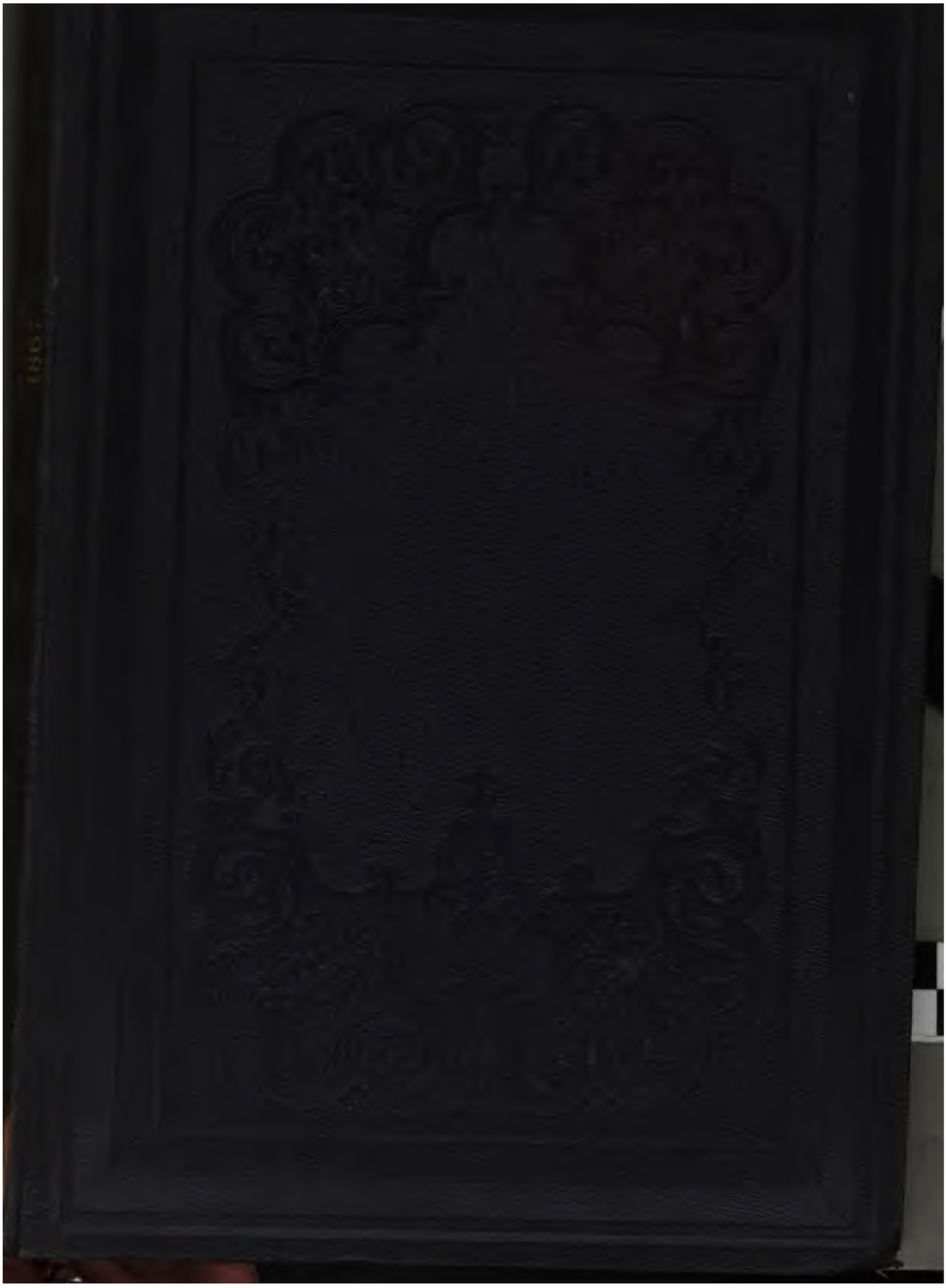

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15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

CHRONOLOGICAL INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED,

For the Year 1867.

Printed and Published by Order of the Commissioners of Patents

UNDER THE

ACT of 15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

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CHRONOLOGICAL INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED.

WOOD. WOOD. 1st January 1867.	1. WILLIAM WOOD, and JAMES WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the manufacture of fibrous yarns or threads and in apparatus for the same." *Provisional protection only.*
MUIR. 1st January 1867.	2. WILLIAM MUIR, of the Britannia Works, in the City of Manchester, and of No. 10, John Street, Adelphi, in the City of Westminster, Engineer, for an invention for—"Improvements in planing machines, which improvements are also applicable to other machines and engines in which sliding surfaces are employed." *Provisional protection only*
CAMPBELL. 1st January 1867.	3. ANDREW DWIGHT CAMPBELL, of Manchester, in the County of Lancaster for an invention for—"An improved bench planing machine."—*A communication to him from abroad by Joseph Jones, of Newark, New Jersey, United States of America. Letters Patent sealed.*
STEWART. 1st January 1867.	4. GEORGE STEWART, of the City and County of Aberdeen, North Britain, for an invention for—"Improvements in the manufacture of combs and in the machinery or apparatus employed therefor." *Letters Patent sealed.*
HENRY. 1st January 1867.	5. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—Improvements in apparatus for evaporating and concentrating cane juice and other juices and liquids."—*A communication to him from abroad by George Brocklehurst, of Trinidad, in the West Indies, Engineer. Letters Patent sealed.*
JAMES. 1st January 1867.	6. HENRY ALFRED JAMES, of Cheltenham, in the County of Gloucester, Esquire, for an invention for—"An improved portable folding chair." *Letters Patent sealed.*
HART. 1st January 1867.	7. HERBERT WILLIAM HART, of Clapham, in the County of Surrey, Engineer, for an invention for—"Improved apparatus for containing advertizing and address cards for public distribution." *Provisional protection only.*
WOODRUFF. BROWNING. 1st January 1867.	8. GEORGE BALDWIN WOODRUFF, and GEORGE BROWNING, both of Cheapside, in the City of London, Engineers, for an invention for—"Improvements in the construction of button hole sewing-machines." *Letters Patent sealed*
MC GLASHAN. BRITTLEBANK. 1st January 1867.	9. ALEXANDER MC GLASHAN, of Coal Yard, Drury Lane, in the County of Middlesex, Engineer, and ARTHUR BRITTLEBANK, of Bozier's Court, Tottenham Court Road, in the same County, Engineer, for an invention for—"Improvements in machinery or apparatus for feeding paper to printing machines, and for taking off or removing and piling the same after printing." *Provisional protection only.*
PLEWS. 2nd January 1867.	10. JOHN PLEWS, of Number 3, Bucklersbury, in the City of London, Civil Engineer, for an invention for—"Improvements in breech-loading fire-arms and ordnance." *Letters Patent sealed.*
ABEL. 2nd January 1867.	11. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane' in the County of Middlesex, Patent Agent, for an invention for—"An improved mode of and machinery or apparatus for obtaining power from the motion of a ship or vessel at sea, for pumping, ventilating and other purposes."—*A communication to him from abroad by Wilhelmus Johannes Van de Ven, of Cape Town, Cape of Good Hope, Captain of Mercantile Service. Provisional protection only.*

ELLISON.
2nd January 1867.

12. JAMES CHARLES ELLISON, of Shelf Dye Works, near Halifax, in the County of York, for an invention for—"Improvements in machinery or apparatus for folding fabrics, and also for folding and inserting cardboards, metallic-plates or other substances between the folds of fabrics to be pressed." *Provisional protection only.*

WARD.
VIRGO.
2nd January 1867.

13. ALFRED WARD, of Bradford, in the County of York, and CHARLES GEORGE VIRGO, also of Bradford, in the County of York, for an invention for—"Improvements in the construction of scarfs." *Letters Patent sealed.*

NOKES.
SANDERS.
3rd January 1867.

14. BENJAMIN NOKES, and THOMAS SANDERS, both of Birmingham, in the County of Warwick, for an invention for—"An improved 'Lady's Companion,' consisting of call bell, reel stand and pincushion." *Provisional protection only.*

KENYON.
3rd January 1867.

15. JOHN WILLIAM KENYON, of Chorlton upon Medlock, in the County of Lancaster, Boiler Inspector, for an invention for—"Improvements in apparatus for removing the scum from the surface of the water in steam-boilers." *Letters Patent sealed.*

SMITH.
3rd January 1867.

16. GEORGE BOND SMITH, of the firm of Barwell Brothers and Smith, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in supports for the insulators of electric telegraphs, and in affixing the said supports to the posts of the said telegraphs." *Provisional protection only.*

COCKSHOOT.
3rd January 1867.

17. JOSEPH COCKSHOOT, junior, of Strangeways, Manchester, in the County of Lancaster, Coach Builder, for an invention for—"Certain improvements in the manufacture of carriages, coaches and other vehicles." *Letters Patent sealed.*

CHIPPINDALE.
3rd January 1867.

18. WILLIAM CHIPPINDALE, of Harrogate, in the County of York, for an invention for—"Improvements in apparatus employed in coupling railway carriages to each other." *Letters Patent sealed.*

BROADBENT.
3rd January 1867.

19. JOSEPH KNOWLES BROADBENT, of the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for the prevention of smoke from furnaces used for steam-boilers and other similar purposes." *Letters Patent sealed.*

HELSBY.
3rd January 1867.

20. WILLIAM GEORGE HELSBY, of Liverpool, in the county of Lancaster, Photographic Artist, for an invention for—"An improved system of and apparatus for manufacturing photographic pictures." *Letters Patent sealed.*

LAMOREUX.
3rd January 1867.

21. WENDELL LAMOREUX, of the City and State of New York, in the United States of America, but now residing at the Charing Cross Hotel, in the Strand, in the County of Middlesex, for an invention for—"Improvements in applying teeth to saws." *Provisional protection only.*

KNAGGS.
3rd January 1867.

22. WALTER KNAGGS, of No. 5, Euston Grove, Euston Square, in the County of Middlesex, for an invention for—"Impovements in apparatus for evaporating and boiling saccharine liquors." *Letters Patent sealed.*

CORROY.
PAIN.
KULL.
3rd January 1867.

23. CHARLES CORROY, of 66, Dean Street, Soho Square, GEORGE EDWARD PAIN, of 121, High Street, Camden Town, and JOHN KULL, of 3, Cumberland Place, Westbourne Grove, Bayswater, all in the County of Middlesex, for an invention for—"A new specimen of oil for lighting by the use of purified resin oil combined with petroleum, paraffin, schiste, and any other mineral oil, called phoenix and composite oil." *Provisional protection* NOT *granted.*

HASELTINE.
4th January 1867.

24. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention for—"Improvements in cartridges."—*A communication to him from abroad by Samuel Remington, of Ilion, New York, United States of America.* *Provisional protection only.*

WILKINS.
4th January 1867.

25. JOHN WILKINS, of No. 1, Clare Terrace, Oak St., Wolverhampton, in the County of Stafford, for an invention for—"An improved mould for making cigarettes." *Provisional protection only.*

AIKMAN.
4th January 1867.

26. FREDERICK ROBERTSON AIKMAN, Lieutenant Colonel Commanding 2nd City of London Rifle Volunteer Corps, for an invention for—"Improvements in rifles and ordnance for the purpose of instructing soldiers to fire with precision over long ranges, and for obtaining a correct register of the shooting by showing the result of each shot." *Provisional protection only.*

LANE.
4th January 1867.

27. JOSIAH LANE, of West Bromwich, in the County of Stafford, Machinist, for an invention for—"Improvements in apparatus for heating water and delivering water to steam-boilers, which improvements are also applicable to other purposes."
Provisional protection only.

DAGNALL.
4th January 1867.

28. PATRICK DAGNALL, of Aldershot, in the County of Hants, Corporal in the Royal Engineers, for an invention for—"Improvements in breech-loading fire-arms."
Provisional protection only.

I'ANSON.
KITCHING.
4th January 1867.

29. CHARLES I'ANSON, and ALFRED KITCHING, both of Darlington, in the County of Durham, Engineers, for an invention for—"Improvements in apparatus for locking the levers or handles for working railway switches and signals."
Provisional protection only.

GREGORY.
4th January 1867.

30. EBENEZER NOAH GREGORY, of Camberwell, in the County of Surrey, Paper-machine Wire-cloth Manufacturer, for an invention for—"Improvements in paper-making machinery." *Letters Patent sealed.*

SCHUCHT.
4th January 1867.

31. JOHN HENRY SCHUCHT, of No. 14, Store Street, Bedford Square, in the County of Middlesex, Pianoforte Manufacturer, for an invention for—"Improvements in the action of upright pianofortes." *Provisional protection only.*

BIRD.
4th January 1867.

32. JAMES BIRD, of No. 6, Seymour Street West, Connaught Square, in the County of Middlesex, for an invention for—"Improvements in the manufacture of artificial fuel." *Provisional protection only.*

DOWLING.
GREVES.
5th January 1867.

33. DANIEL DOWLING, of Turin, in the Kingdom of Italy, at present residing at Radley's Hotel, Blackfriars, in the City of London, Ex-Colonel of the Southern Army of Italy, and CHARLES GREVES, of 17, Shepherdess Walk, City Road, Gunmaker, for an invention for—"Improvements in breech-loading fire-arms."
Letters Patent sealed.

LOGAN.
5th January 1867.

34. GEORGE LOGAN, of Kelso, in the County of Roxburgh, in Scotland, for an invention for—"An improved apparatus for working 'punkahs,' the same being also applicable for watering tatties." *Provisional protection only.*

COWPER.
5th January 1867.

35. EDWARD ALFRED COWPER, of No. 35A, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in steam jackets for steam-engines." *Provisional protection only.*

DUTTON.
5th January 1867.

36. EDWARD KENWORTHY DUTTON, of the Patent Office, 3, Smithy Door, Manchester, in the county of Lancaster, Consulting Engineer, for an invention for—"Improvements in water delivery 'nozzles' employed in the extinction of fire."—*A communication to him from abroad by William Barbour, of Lawrence, in the State of Massachusetts, in the United States of America.* *Letters Patent sealed.*

PRESTON.
DANIA.
HOUGHTON.
BOTTOMLEY.
5th January 1867.

37. CHARLES PRESTON, Machinist, GEORGE DANIA, Machinist, WILLIAM HOUGHTON, Manager, and REUBEN BOTTOMLEY, Cotton Spinner, all of Rochdale, in the County of Lancaster, for an invention for—"Improvements in or applicable to mules and like machines for roving, slubbing, spinning, twisting and doubling cotton, wool and other fibrous materials." *Provisional protection only.*

LAMB.
5th January 1867.

38. ISAAC WIXOM LAMB, of Nelson Street, in the Town and County of Leicester, for an invention for—"Improvements in knitting machines."
Provisional protection only.

BIGGS.
7th January 1867.

39. BENJAMIN BIGGS, of 3, Lawrence Pountney Hill, in the City of London, Merchant, for an invention for—"Improvements in and applicable to candles."
Letters Patent sealed.

POWNALL.
7th January 1867.

40. CHARLES JAMES POWNALL, of the Union Club, London, Gentleman, for an invention for—"Improvements in the means of saving life in pits and mines."
Provisional protection only.

KELLY.
LAURENT.
7th January 1867.

41. CHARLES KELLY, of No. 11, Charles Street, Berners Street, and CONSTANT LAURENT, of No. 85, High Street, Mary-le-bone, both in the County of Middlesex, for an invention for—"Improvements in harmoniums and organs."
Provisional protection only.

VILA Y JOVÉ.
7th January 1867.

42. JUAN VILA Y JOVÉ, of Barcelona, Town in the Spanish Kingdom, for an invention for—"An improved method of and apparatus for obtaining motive-power."
Letters Patent sealed.

DŒRING. 7th January 1867.

43. FREDERICK BERNARD DŒRING, of Bayswater, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in engines for boring and working rock and other material, and in stands for such engines, the improvements in engines being partly applicable to other purposes." *Letters Patent sealed.*

NEWTON. 7th January 1867.

44. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in facilitating the removal of the bark from oak and other woods."—*A communication to him from abroad by Le Vicomte Louis de Villermont, of Brussels, in the Kingdom of Belgium.* *Letters Patent sealed.*

ASHTON. 7th January 1867.

45. ROBERT HOWE ASHTON, of Ashton-on-Mersey, in the County of Chester, Gentleman, for an invention for—"Improvements in the production of printing and embossing surfaces from photographs." *Provisional protection only.*

NEWTON. 7th January 1867.

46. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in augers."—*A communication to him from abroad by Amasa C. Kasson and Nelson Coles Gridley, both of St. Louis, in the State of Missouri, United States of America.* *Letters Patent sealed.*

WAY. 7th January 1867.

47. WILLIAM WAY, of Eliot Place, Blackheath, in the County of Kent, M.D., for an invention for—"Improvements in preparing phosphatic minerals for use as manure."—*The result partly of a communication made to him from abroad by Cornwall Henwood, of Sombrero, West Indies, and partly of invention by himself.* *Letters Patent sealed.*

CLAUS. 7th January 1867.

48. CARL FRIEDRICH CLAUS, of Middlesbro'-on-Tees, in the County of York, Chemist, for an invention for—"Improvements in the mode of raising brine in or from boreholes of great depth." *Letters Patent sealed.*

STANTON. 8th January 1867.

49. JOHN STANTON, Gunlock Manufacturer, of No. 13, Clifton Street, Wolverhampton, in the County of Stafford, for an invention for—"An improved self-acting safety gun lock." *Provisional protection only.*

MARTIN. 8th January 1867.

50. WILLIAM MARTIN, of the firm of Martin and Chamberlain, of Birmingham, in the County of Warwick, Architects, for an invention for—"Improvements in the stalls and boxes or seats of treadwheel and crank sheds or houses, and other like sheds or houses." *Letters Patent sealed.*

ROBINSON. 8th January 1867.

51. ROBERT ROBINSON, of Preston, in the County of Lancaster, Engineer and Tool Maker, for an invention for—"Improved apparatus for regulating, controlling, and for varying the speed of shafts and machinery." *Letters Patent sealed.*

PRENTICE. 8th January 1867.

52. EUSTACE CAREY PRENTICE, of Stowmarket, in the County of Suffolk, for an invention for—"Improvements in waterproofing or encasing cartridges and other articles liable to injury by damp." *Letters Patent sealed.*

WOOD. 8th January 1867.

53. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the manufacture of jacquard tapestry, and plain and printed terry and cut pile carpets, by the application of materials not hitherto used in such manufacture." *Provisional protection only.*

JOHNSON. 8th January 1867.

54. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture and refining of sugar."—*A communication to him from abroad by Jules Emile Boivin and Désiré Loiseau, of Paris, in the Empire of France, Civil Engineers.* *Letters Patent sealed.*

NEWTON. 8th January 1867.

55. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved pneumatic apparatus for the treatment of diseases in an attenuated atmosphere."—*A communication to him from abroad by George Hadfield, of Cincinnati, in the State of Ohio, United Sates of America.* *Letters Patent sealed.*

MURPHY. 9th January 1867.

56. WILLIAM JEREMIAH MURPHY, of Cork, in the County of the City of Cork, Ireland, for an invention for—"Improvements in guns or cannon, and in projectiles to be used therewith, also applicable to fire-arms generally and their projectiles." *Letters Patent sealed.*

WINDER, 9th January 1867.

57. RICHARD WINDER, of No. 18, Abingdon Street, Westminster, Engineer, for an invention for—"Improved machinery for pocketing hops, for puddling dams, for punning at back of long retaining walls, river or sea embankment facings and such like works." *Letters Patent sealed.*

SUGG, 9th January 1867.

58. WILLIAM THOMAS SUGG, of Vincent Works, Vincent Street, in the City of Westminster, for an invention for—"Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes." *Letters Patent sealed.*

BURTON. 9th January 1867.

59. JAMES HENRY BURTON, of 76, Cheapside, in the City of London, Engineer, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

DOULTON. 9th January 1867.

60. HENRY DOULTON, of High Street, Lambeth, in the County of Surrey, for an invention for—"Improvements in pottery kilns." *Letters Patent sealed.*

PETRIE, 9th January 1867.

61. JAMES PETRIE, of Rochdale, in the County of Lancaster, Engineer, for an invention for —"Improvements in steam-engines." *Letters Patent sealed.*

HETHERINGTON. 9th January 1867.

62. JOHN MUIR HETHERINGTON, of Manchester, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in machinery for preparing cotton and other fibrous materials for spinning." *Letters Patent sealed.*

NEWTON. 9th January 1867.

63. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in artificial legs."—*A communication to him from abroad by Alexander Tough Watson, of the City and State of New York, United States of America.* *Letters Patent sealed.*

HAND. 10th January 1867.

64. LEWIS HAND, of No. 22, Coleman Street, in the City of London, Attorney-at-Law, for an invention for—"Improvements in treating benzole and other hydrocarbon liquids, and in making such liquids non-explosive, and of generating an illuminating gas therefrom."—*A communication to him from abroad by John Johnson, of Wilmington, Illinois, in the United States of America.* *Provisional protection only.*

INDERWICK. 10th January 1867.

65. GEORGE INDERWICK, of Princes Street, Leicester Square, in the County of Middlesex, Pipe Merchant, for an invention for—"Improvements in tobacco pouches." *Provisional protection only.*

FOUCAUT. 10th January 1867.

66. ALFRED FOUCAUT, of Rue de Grammont, Paris, in the French Empire, Doctor of Medicine, in the French Imperial Navy, for an invention for—"Improvements in waterproof and other articles of wearing-apparel." *Provisional protection only.*

ROBINS. 10th January 1867.

67. WILLIAM BURNET ROBINS, of Penton Place, Kennington Road, in the County of Surrey, Gentleman, for an invention for—"Improvements in fire-arms and ordnance, and in the cartridges or projectiles to be used therewith." *Provisional protection only.*

SILVESTER. 11th January 1867.

68. JOHN SILVESTER, of the firm of George Salter and Company, of West Bromwich, in the County of Stafford, Manufacturers, for an invention for—"Improvements in weighing machines." *Letters Patent sealed.*

HUGHES. 11th January 1867.

69. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"A new or improved differential pump for pumping and discharging varying quantities of liquid and producing varying pressure."—*A communication to him from abroad by Pierre du Rieux and Edouard Roettger, of Lille, in the Empire of France, Civil Engineers.* *Letters Patent sealed.*

CHAFFEE. 11th January 1867.

70. EDWIN MARCUS CHAFFEE, of the City and County of Providence, State of Rhode Island, United States of America, Manufacturer, for an invention for—"An improvement in elliptic or other elastic springs." *Letters Patent sealed.*

MORVAN. 11th January 1867.

71. ARTHUR GUY MORVAN, of South Bergen, in the County of Hudson, and State of New Jersey, United States of America, for an invention for—"Certain improvements in the art of making photographic transfers, adapted to the purpose of engraving or lithography, or of making plates or blocks from which to print the design or other matter transferred." *Letters Patent sealed.*

WIDNALL. 11th January 1867.

72. SAMUEL PAGE WIDNALL, of Grantchester, Cambridgeshire, for an invention for—"An improved form or bench with back to fold so as to occupy only a few inches in thickness." *Letters Patent sealed.*

EVANS.
11th January 1867.

73. FREDERICK JOHN EVANS, of the Chartered Gas Works, in the City of Westminster, for an invention for—"Improvements in the manufacture of illuminating gas." *Provisional protection only.*

DARLING.
11th January 1867.

74. JOHN DARLING, of Stane, in the County of Lanark, North Britain, for an invention for—"Improvements in penholders and in the means or apparatus for supplying ink to pens." *Provisional protection only.*

KENDRICK.
11th January 1867.

75. ISAIAH KENDRICK, of Walworth, in the County of Surrey, Steam-Boiler Manufacturer, for an invention for—"Improvements in furnaces and in the manufacture of fire-bars for the same." *Letters Patent sealed.*

HOWARD.
BOUSFIELD.
11th January 1867.

76. JAMES HOWARD, Agricultural Engineer, and EDWARD TENNEY BOUSFIELD, Engineer, both of Bedford, in the County of Bedford, for an invention for—"Improvements in tubular steam-boilers." *Letters Patent sealed.*

HENRY.
11th January 1867.

77. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes."—*A communication to him from abroad by Francois Coignet, of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

SIMPSON.
11th January 1867.

78. MICHAEL HODGE SIMPSON, residing at No. 127, Milk Street, Boston, United States of America, for an invention for—"Improvements in the construction of seats or chairs suitable for preserving life in case of shipwreck, and also for being used as bathing chairs." *Letters Patent sealed; no specification filed.*

BUSS.
11th January 1867.

79. HENRY BUSS, of 56, High Street, Shoreditch, in the County of Middlesex, M.D., for an invention for—"Improvements in constructing quays, jetties, piers, sea walls and breakwaters, in the formation of reservoirs, docks, basins, coast harbours, harbours of refuge, lighthouses and sea batteries, applicable also for the reclamation of land and for the building of bridges." *Letters Patent sealed.*

TOMLINSON.
11th January 1867.

80. JOHN TOMLINSON, of Pooley's Park, City Road, Holme, Manchester, in the County of Lancaster, for an invention for—"Improvements in bakers' and other ovens, and also in scrap and other furnaces." *Letters Patent sealed.*

HOADLY.
12th January 1867.

81. JOHN HOADLY, of Dover, in the County of Kent, for an invention for—"An improved apparatus for preventing wind-draughts and water from passing under doors, casements and similar places." *Provisional protection only.*

WEBSTER.
DEANE.
RUMBLE.
12th January 1867.

82. JAMES WEBSTER, of Birmingham, in the County of Warwick, Engineer, EDWARD DEANE, of No. 1, Arthur Street East, City of London, and WILLIAM RUMBLE, Inspector of Machinery afloat, Royal Navy, of Sheerness, in the County of Kent, for an invention for—"Metallic zinc paint." *Provisional protection only.*

DE BERGUE.
12th January 1867.

83. CHARLES DE BERGUE, of 10, Strand, in the City of Westminster, Engineer, for an invention for—"Improved instruments for use in packing permanent way." *Letters Patent sealed.*

JOHNSON.
12th January 1867.

84. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in railings or fences."—*A communication to him from abroad by Arthur Gandillot, of Paris, in the Empire of France.* *Provisional protection only.*

CUNNINGHAM.
12th January 1867.

85. HENRY DUNCAN PRESTON CUNNINGHAM, of Bury, near Gosport, County of Hants, for an invention for—"Improvements in shot or ammunition lifters or holders, and carriages for the same." *Letters Patent sealed.*

GEDGE.
12th January 1867.

86. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention of—"A novel machine and preparation for dressing and finishing cloth."—*A communication to him from abroad by Alphonse Porée, of 39, Faubourg St. Martin, Paris, France.* *Provisional protection only.*

BLAGDEN.
14th January 1867.

87. WILLIAM GEORGE BLAGDEN, of Hackney Wick, in the County of Middlesex, for an invention for—"An improved method of separating silver from lead."—*A communication to him from abroad by Francisco Marquez-Millan, of No. 7, Rue Liandier, Marseilles, in the Empire of France.* *Letters Patent sealed.*

MUSHET.
14th January 1867.

88. ROBERT MUSHET, of Cheltenham, in the County of Gloucester, Metallurgist, for an invention for—"An improvement in the manufacture of cast steel." *Letters Patent sealed.*

MAPPIN.
14th January 1867.

89. WALTER SANDELL MAPPIN, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in breech-loading fire-arms and in cartridges for breech-loading fire-arms." *Provisional protection only.*

BRAMPTON.
14th January 1867.

90. FREDERICK BRAMPTON, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new or improved compound material or substance to be used for binding books, for panelling, and for other purposes where strength and lightness are required." *Letters Patent sealed.*

REILLY.
14th January 1867.

91. JAMES REILLY, of The New Globe Mahogany Chair and Cabinet Works, Barrack Street, Hulme, Manchester, in the County of Lancaster, for an invention for—"Improvements in making and repairing highways, roads or walks, which improvements are also applicable to bedding and adjusting railway sleepers and other similar purposes." *Letters Patent sealed.*

POWNALL.
14th January 1867.

92. CHARLES JAMES POWNALL, of the Union Club, London, Gentleman, for an invention for—"A new or improved method of facilitating the removal of snow, hail, or ice from streets or other places, by means of steam or hot air injected upon it in a close chamber." *Provisional protection only.*

NEWTON.
14th January 1867.

93. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in looms for knitting."—*A communication to him from abroad by Augustus Celanus Carey and Hugh K. Moore, both of Malden, state of Massachusetts, United States of America.* *Letters Patent sealed.*

BRANDON.
14th January 1867.

94. ALEXANDER HORACE BRANDON, Civil Engineer, of 13, Rue Gaillon, Paris, for an invention for—"An improved carriage lifting jack."—*A communication to him by Noel Victor Dominique Barbou, Locksmith, also residing No. 13, Rue Gaillon, Paris.* *Letters Patent sealed.*

ATKIN.
14th January 1867.

95. ROBERT ATKIN, of Sheffield Gardens, Campden Hill, Kensington, in the County of Middlesex, Master Mariner, for an invention for—"Improvements in the construction of ships and other navigable vessels, and in the mode of rigging, propelling and steering the same, including children's toy ships." *Provisional protection only.*

HASELTINE.
14th January 1867.

96. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved apparatus for lubricating carriage axles."—*A communication to him from abroad by John Burt Powell, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

HASELTINE.
14th January 1867.

97. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery for felting hat bodies."—*A communication to him from abroad by Job William Blackham, of Brooklyn, New York, United States of America.* *Complete specification; Letters Patent sealed.*

DE WILDE.
14th January 1867.

98. SYLVAN DE WILDE, of Alexandra Terrace, Hatcham Park Road, in the County of Kent, C.E., for an invention for—"Improvements in apparatus used when probing for balls or projectiles." *Letters Patent sealed.*

CLARK.
14th January 1867.

99. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in pipe moulding and casting apparatus and in black washing the moulds."—*A communication to him from abroad by George Ross, of Newport, in the County of Campbell and State of Kentucky, United States of America.* *Letters Patent sealed.*

CLARK.
14th January 1867.

100. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in rotary engines."—*A communication to him from abroad by Truman Merriam and James Cushing, both of Waterloo, Jefferson County, State of Wisconsin, United States of America.* *Letters Patent sealed.*

HOCKING.
15th January 1867.

101. JOSEPH MATTHEWS HOCKING, of Marshal Reate, Poplar, in the County of Middlesex, for an invention for—"Improvements in the means and apparatus for condensing smoke and vapours." *Provisional protection only.*

BONNEVILLE. 15th January 1867.

102. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Ru due Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in small arms."—*A communication from Etienne Bonnin, a person resident at the Hôtel of the Minister of the Marine and the Colonies, in Paris, aforesaid, Lieutenant in the Imperial Navy, Knight of the Order of the Legion of Honour, and Orderly Officer of his Excellency the French Minister of the Marine and the Colonies, aforesaid.* *Complete specification; Letters Patent sealed.*

BONNEVILLE. 15th January 1867.

103. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in sewing-machines."—*A communication from Georges Bernhard Seibert, a person resident at No. 7, Cité D'Antin, in Paris, aforesaid, Painter.* *Complete specification; Protection for* SIX *months only.*

TAYLOR. WINTER. 15th January 1867.

104. EDWARD BROWN TAYLOR, and FREDERICK WINTER, of Gresham Street, in the City of London, Warehousemen, for an invention for—"Improvements in the construction of fire screens, fans, parasols, sun shades and such like articles." *Provisional protection only.*

HENRY. 15th January 1867.

105. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus, may be moved to and worked at various parts of articles or surfaces to be operated on by the same."—*A communication to him from abroad by Norbert Belvallette, of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

COOLEY. 15th January 1867.

106. ARNOLD JAMES COOLEY, of 35, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture and preparation of dry tinctorial compounds capable of easy solution in water." *Letters Patent sealed.*

HILL. 15th January 1867.

107. AUSTIN HILL, of Leicester, Agricultural Engineer, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

ROBERT-HOUDIN. 15th January 1867.

108. JEAN JACQUES EMILE ROBERT-HOUDIN, of 29, Boulevart St. Martin, Paris, Clockmaker, for an invention for—"Improvements in clocks." *Letters Patent sealed.*

COLVILL. 16th January 1867.

109. JOHN COLVILL, of No. 39, Rue de l'Echiquier, Paris, in the Empire of France, Civil Engineer, for an invention for—"Certain improvements in meters for gas and liquids, such improved meters being also applicable as a motive-power."—*A communication from Homer H. Stuart, a person resident at Jamaica, in the County of Queen's and State of New York, in the United States of America.* *Provisional protection only.*

LYTTLE. 16th January 1867.

110. WILLIAM ALEXANDER LYTTLE, of the General Post Office, London, for an invention for—"Improvements in and connected with the folding of newspapers and other periodical publications." *Provisional protection only.*

CLAYTON. 16th January 1867.

111. JOHN CLAYTON, of West Bromwich, in the County of Stafford, Furnace Builder and Contractor, for an invention for—"Improvements in vertical furnaces for melting and refining metals." *Provisional protection only.*

LANCASTER. 16th January 1867.

112. CHARLES WILLIAM LANCASTER, of New Bond Street, in the County of Middlesex, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

CRAVEN. 16th January 1867.

113. JOSEPH CRAVEN, of the firm of D. and J. Craven, of Thornton, near Bradford, in the County of York, Shawl Manufacturers, for an invention for—"Improvements in sewing machinery or apparatus for fringing shawls, mantles or similar articles." *Letters Patent sealed.*

HOOKHAM. 16th January 1867.

114. GEORGE HOOKHAM, of Summertown House, Summertown, in the County of Oxford, for an invention for—"Improvements in fire-arms and ordnance, and in cartridges to be used therewith." *Provisional protection only.*

DAVIES. HELWIG. 16th January 1867.

115. JOHN DAVIES, of No. 24, Ludgate Hill, in the City of London, and ARTHUR HELWIG, of No. 73, Old Kent Road, in the County of Surrey, Engineer, for an invention for—"Improvements in the permanent way of railways." *Letters Patent sealed.*

HOWARTH. PEARSON. PEARSON. 17th January 1867.

116. WILLIAM HOWARTH, Dentist, and MASON PEARSON, Overlooker, both of Bradford, in the County of York, and JOHN PEARSON, of Thornton, in the same County, Jacquard Harness Maker, for an invention for—"Improvements in jacquard engines." *Letters Patent sealed.*

JAMES. 17th January 1867.

117. ROBERT JAMES, of Poole, in the County of Dorset, for an invention for—"Improvements in the means and apparatus for ventilating mines." *Provisional protection only.*

STAFFORD. MCCALLUM. 17th January 1867.

118. WILLIAM STAFFORD, and WILLIAM PORTER MCCALLUM, both of Blackburn, in the County of Lancaster, Engineers, for an invention for—"An improved bolt." *Provisional protection only.*

SÜVERN. 17th January 1867.

119. ERNST SÜVERN, of Halle, in the Kingdom of Prussia, Architect, for an invention for—"An improved mode of and apparatus for purifying the impure waters emanating from sugar-factories and other industrial establishments, applicable also to the purification of sewage water." *Letters Patent sealed.*

BRAXTON. 17th January 1867.

120. CHARLES GEORGE BRAXTON, Builder, of Stamshaw Terrace, Portsea, County of Southampton, for an invention for—"An improved hydrostatic engine." *Provisional protection only.*

NEWTON. 17th January 1867.

121. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in tinting or colouring the surface of paper or other materials or fabrics."—*A communication to him from abroad by George Streat, of the City and State of New York, United States of America.* *Provisional protection only.*

NEWHALL. 17th January 1867.

122. RICHARD NEWHALL, of Astwood Bank, in the County of Worcester, Needle Case Manufacturer, for an invention for—"Improvements in cases or receptacles for needles, pins, cards, stamps, photographs, cigars and other similar articles." *Letters Patent sealed.*

BARKER. 17th January 1867.

123. DAVID BARKER, of Northfleet, in the County of Kent, for an invention for—"Improvements in the construction of apparatus for mixing, pressing and moulding coal and other substances for the formation of artificial fuel, and dividing the same into blocks, such apparatus being also applicable to other analogous operations." *Letters Patent sealed.*

STARR. 17th January 1867.

124. HENRY STARR, of No. 145, Cheapside, in the City of London, Merchant, for an invention for—"An improved safety match-box."—*A communication to him from abroad by Henry Arthur Gadsden, of the City, County and State of New York, United States of America, temporarily residing at Havre, in the Empire of France.* *Letters Patent sealed.*

COOKE. STANDFIELD. 18th January 1867.

125. CHARLES FREDERICK COOKE, of the Buckingham Works, in the City of York, and JOHN STANDFIELD, of 46, Upper Stamford Street, Blackfriars, in the County of Surrey, Engineers, for an invention for—"Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes." *Letters Patent sealed.*

BERENS. 18th January 1867.

126. AUGUST BERENS, of Liverpool, in the County of Lancaster, Commission Agent, for an invention for—"Improvements in filling splints into the dipping frames used in the manufacture of matches, and in apparatus to be employed for such purpose."—*A communication to him from abroad by Ludwig Anton, of Darmstadt, in the Grand Duchy of Darmstadt.* *Letters Patent sealed.*

SMITH. 18th January 1867.

127. EDWARD JAMES SMITH, of Halifax, in the County of York, for an invention for—"Improved machinery or apparatus for the manufacture of 'lingoes' used in looms for weaving, also in the manufacture of other articles from wire requiring to be stamped or pressed and punched." *Letters Patent sealed.*

LIETAR. 18th January 1867.

128. BERNARD LIETAR, of 4, Rue du Houblon, Brussels, in the Kingdom of Belgium, and of the Royal Hotel, Blackfriars, in the City of London, Mechanic, for an invention for—"An improved composition to be employed in welding or soldering iron upon iron, steel upon steel, and iron upon steel." *Letters Patent sealed.*

BROOMAN. 18th January 1867.

129. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the manufacture of lace."—*A communication to him from abroad by Désiré Sival and Léon Sival, both of Roubaix, France.* *Letters Patent sealed.*

HAMPER. 18th January 1867.	**130.** DOUGLAS WILLIAM HAMPER, of Newcastle-on-Tyne, Engineer, for an invention for—"Improvements in the preparation of finings for fining or clearing fermented liquors." *Provisional protection only.*
FRANKLIN. 18th January 1867.	**131.** JOHN GANGE FRANKLIN, of Broadway, in the County of Somerset, Tanner, for an invention for—"Improvements in tanning." *Letters Patent sealed.*
MARSDEN. 18th January 1867.	**132.** CHARLES BATEMAN MARSDEN, of Birmingham, in the County of Warwick, Master of Arts, Clerk in Holy Orders, for an invention for—"An improved covering or protection from sun or weather, adapted for personal use or wear." *Provisional protection only.*
WELDON. 18th January 1867.	**133.** WALTER WELDON, of Park Villa, West Hill, Highgate, in the County of Middlesex, for an invention for—"Improvements in the manufacture of chlorine, and in the production of artificial oxides of manganese for employment both in that and other manufactures." *Letters Patent sealed.*
WELDON. 18th January 1867.	**134.** WALTER WELDON, of Park Villa, West Hill, Highgate, in the County of Middlesex, for an invention for—"An improved method of manufacturing chlorine." *Letters Patent sealed.*
ROSOMAN. 18th January 1867.	**135.** RICHARD ROBERT LOANE ROSOMAN, of Highlands, Itchen Ferry, Southampton, in the County of Southampton, Gentleman, for an invention for—"The use or adaptation of water pipes or syphons in combination with turbine wheels or other hydraulic engines, for the production of motive-power for propelling ships." *Letters Patent sealed.*
ROBERTSON. 19th January 1867.	**136.** JAMES ROBERTSON, of Manchester, in the County of Lancaster, Umbrella Manufacturer, for an invention for—"Certain improvements in machinery or apparatus to be employed in the manufacture of umbrellas." *Provisional protection only.*
HARDING. 19th January 1867.	**137.** JOHN HARDING, of the firm of James Harding and Company, of Warrington, in the County of Lancaster, Wire Gauze Manufacturers for Safety Lamps, for an invention for—"A new and improved fastener or lock to be employed for securing the cover enclosing the flame in lamps known as the 'Davy,' or lamps of a similar description." *Letters Patent sealed.*
NEWTON. 19th January 1867.	**138.** ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of steam generator."—*A communication to him from abroad by George Gould, of Troy, in the State of New York, United States of America.* *Letters Patent sealed.*
BATE. ASHER. 19th January 1867.	**139.** JAMES BATE, of Smethwick, in the County of Stafford, Manufacturer, and GEORGE ASHER, of Birmingham, in the County of Warwick, Designer and Modeller, for an invention for—"Improvements in making moulds for casting fenders and in fitting bottoms to fenders, which improvements in making moulds for casting fenders may also be applied to the making of moulds for casting other articles." *Provisional protection only.*
GRANT. HERBERT. 19th January 1867.	**140.** JOSEPH GRANT, Carpenter, and JOB HERBERT, Engine Driver, both of the Town and County of Leicester, for an invention for—"Improvements in signals on railways." *Provisional protection only.*
HARRISON. HARRISON. 19th January 1867.	**141.** JOSEPH JOHN HARRISON, of Manchester, in the County of Lancaster, and EDWARD HARRISON, of the same place, Engineers, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*
CHILDS. 19th January 1867.	**142.** AUGUSTUS BRYANT CHILDS, of 481, Oxford Street, London, Engineer, for an invention for—"Improvements in machines for separating foreign seeds and other impurities from wheat, other grain, or seeds."—*A communication to him from abroad by David Monroe Childs, of 13, Rue Gaillon, Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*
BULL. 19th January 1867.	**143.** WILLIAM BULL, of Quality Court, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in glass blowing and in apparatus therefor."—*A communication to him from abroad by Léon Bandoux, of Charleroi, in the Kingdom of Belgium.* *Letters Patent sealed.*
WILLIN. 19th January 1867.	**144.** THOMAS WILLIS WILLIN, of Clerkenwell Green, in the County of Middlesex, for an invention for—"Improvements in the manufacture of watch cases and in apparatus employed therein." *Letters Patent sealed.*

UPWARD. 19th January 1867.

145. ALFRED UPWARD, of the Chartered Gas Company, 146, Goswell Road, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus used for boring and tapping gas and water mains, and in fitting service pipes or cocks thereto." *Letters Patent sealed.*

SLAUGHTER. 19th January 1867.

146. EDWARD SLAUGHTER, of the Avonside Engine Company, Limited, St. Philips, Bristol, for an invention for—"Improvements in locomotive engines." *Provisional protection only.*

HARLOW. 21st January 1867.

147. ROBERT HARLOW, of Heaton Norris, in the County of Lancaster, Brass Founder, for an invention for—"Improvements in the construction of wash-basins, and apparatus for supplying hot and cold water to the same, which improvements are also applicable to apparatus for supplying water to baths and other similar receptacles." *Letters Patent sealed.*

LOVERSIDGE. 21st January 1867.

148. GEORGE LOMAS LOVERSIDGE, of Bury Bank Cottages, Greenfield, Saddleworth, in the County of York, Tanner, for an invention for—"Improvements in the tanning of hides and skins, and in the apparatus employed therein." *Letters Patent sealed.*

WELLS. 21st January 1867.

149. GEORGE MILES WELLS, of 26, Aldermanbury, in the City of London, for an invention for—"Improvements in lasts for boots and shoes." *Letters Patent sealed.*

GEDGE. 21st January 1867.

150. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"A two-branched or double-hooked fish-hook."—*A communication to him from abroad by François Angilard, junior, of 39, Faubourg St. Martin, Paris, France.* *Letters Patent sealed.*

KUNSTMANN. 21st January 1867.

151. ROBERT KUNSTMANN, of Nuremburg, in the Kingdom of Bavaria, now of No. 384, City Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in the mode of and machinery for manufacturing bricks, tiles and other articles of clay." *Provisional protection only.*

ROWLEY. 21st January 1867.

152. JOHN ROWLEY, of Grosvenor Terrace, Camberwell, in the County of Surrey, for an invention for—"An improved process for hardening, bleaching and sweetening crude paraffin." *Letters Patent sealed.*

MCANDREW. 21st January 1867.

153. WILLIAM MCANDREW, of No. 57, King William Street, in the City of London, for an invention for—"Improvements in machinery for ginning cotton."—*A communication to him from abroad by Charles Wilson Boyd, of Sokia, in Asia Minor.* *Provisional protection only.*

EDWARDS. 21st January 1867.

154. JOHN EDWARDS, of Ealing, in the County of Middlesex, for an invention for—"A new horse-shoe cushion." *Letters Patent sealed.*

TOMLINSON. 22nd January 1867.

155. EDWARD TOMLINSON, of 85, Hatton Garden, in the County of Middlesex, for an invention for—"Improvements in ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials." *Provisional protection only.*

HARRISON. HARRISON. HARRISON. CROASDALE. 22nd January 1867.

156. WILLIAM HARRISON, JOHN HARRISON, and HENRY HARRISON, of the firm of J. Harrison and Sons, of Blackburn, in the County of Lancaster, Engineers, and BENJAMIN CROASDALE, of the same place, formerly Overlooker in a Cotton Mill, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

GLADSTONE. 22nd January 1867.

157. THOMAS MURRAY GLADSTONE, of York Chambers, Adelphi, Strand, in the City of Westminster, in the County of Middlesex, for an invention for—"An improvement in ships' anchors." *Provisional protection only.*

MARTIN. 22nd January 1867.

158. WILLIAM ARENA MARTIN, of 90, Cannon Street, in the City of London, Civil Engineer, for an invention for—"Improvements in apparatus for consuming smoke, promoting combustion and feeding furnaces with fuel." *Letters Patent sealed.*

CHRÉTIEN. 22nd January 1867.

159. JEAN CHRÉTIEN, of No. 150, Boulevard Richard Lenoir, Paris, in the Empire of France, Civil Engineer, for an invention for—"An improved apparatus for raising and lowering heavy bodies." *Letters Patent sealed.*

REIN.
22nd January 1867.

160. FREDERICK CHARLES REIN, of the Strand, in the County of Middlesex, Manufacturer of Acoustic Instruments, for an invention for—"Improved means of conveying sound from preachers or lecturers to the congregation or audience."
Letters Patent sealed.

CLARK.
22nd January 1867.

161. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in blast furnaces and in the method of working the same."—*A communication to him from abroad by Albert Philippe Adrien Accarain, Manager of the Blast Furnaces at Outreaux, France.*
Letters Patent sealed.

EXALL.
22nd January 1867.

162. WILLIAM EXALL, of Reading, in the County of Berks, Engineer, for an invention for—"Improvements in the boiler apparatus of portable steam-engines."
Provisional protection only.

NORTHROP.
TETLEY.
TETLEY.
22nd January 1867.

163. JONATHAN NORTHROP, SAMUEL TETLEY, and WILLIAM HARRISON TETLEY, of the firm of Jonathan Northrop and Co., of Thornton, near Bradford, in the County of York, Shawl Manufacturers, for an invention for—"Improvements in sewing machinery or apparatus for fringing shawls, mantles, or other fabrics requiring to have a fringe thereon." *Letters Patent sealed.*

PATISON.
22nd January 1867.

164. JOHN PATISON, of the Town of Airdrie, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in the production of illuminating gas, and in the manufacture and application or use of new or improved materials or fuels for the same, and in the means or apparatus employed therefor." *Provisional protection only.*

BRIDGEWATER.
22nd January 1867.

165. HENRY BRIDGEWATER, of Watford, in the County of Herts, Civil Engineer, for an invention for—"An improved construction of turntable."
Letters Patent sealed.

'NEWTON.
22nd January 1867.

166. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in injectors for steam-boilers."—*A communication to him from abroad by Alfred Lenz, of Vienna, in the Empire of Austria.* *Provisional protection only.*

STANLEY.
23rd January 1867.

167. JOHN MARTIN STANLEY, of Birmingham, in the County of Warwick, for an invention for—"Improvements in ladies' belts." *Provisional protection only.*

COLEMAN.
[23rd January 1867.

168. COLEMAN COLEMAN, of 32, Little Moorfields, in the City of London, Manufacturer, for an invention for—"Improvements in crinoline skirts."
Letters Patent sealed.

DENNIS.
23rd January 1867.

169. WILLIAM DENNIS, of No. 57, Aldermanbury, in the City of London, Merchant, for an invention for—"Improvements in letter boxes, letter pillars and such like depositories." *Provisional protection only.*

COOK.
COOK.
23rd January 1867.

170. SAMUEL COOK, and GEORGE COOK, of Bury, in the County of Lancaster, Machinists, for an invention for—"Improvements in the manufacture of weft forks used in looms for weaving." *Provisional protection only.*

CHAMBERLAIN.
23rd January 1867.

171. ARTHUR CHAMBERLAIN, of the firm of Smith and Chamberlain, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in lamps for burning paraffin oil and other volatile oils."
Provisional protection only.

BONNEVILLE.
23rd January 1867.

172. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved process of treating skins in order to separate therefrom the hair and wool, and in the preparation of the hair for the manufacture of hats."—*A communication from Auguste Frayssé, junior, a person resident at No. 5, Rue Croix-des-Petits-Champs, in Paris aforesaid, Chemist.* *Provisional protection only.*

DRONSFIELD.
23rd January 1867.

173. JOSEPH STANDRING DRONSFIELD, of the firm of Dronsfield Brothers, Machinists, of Oldham, in the County of Lancaster, for an invention for—"Certain improvements in apparatus for grinding 'cards' to be employed in preparing cotton and other fibrous materials." *Letters Patent sealed.*

ROSS.
23rd January 1867.

174. THOMAS ROSS, of Featherstone Buildings, in the County of Middlesex, Optician, for an invention for—"Improvements in the manufacture of lenses for photographic cameras and various optical instruments." *Letters Patent sealed.*

NEWTON.
23rd January 1867.

175. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in cotton bale ties."—*A communication to him from abroad by John Cooper Lee, of Blakely, in the State of Georgia, United States of America.*
Letters Patent sealed.

PINNEY.
23rd January 1867.

176. JOHN PINNEY, of the Town and County of Bedford, Engineer, for an invention for—"Improvements in the manufacture of burglar-proof safes and in fastening the doors thereof."
Provisional protection only.

APPS.
24th January 1867.

177. ALFRED APPS, Optician, of 433, Strand, London, in the County of Middlesex, for an invention for—"Improvements in electrical apparatus."
Letters Patent sealed.

PALMER.
24th January 1867.

178. FITZMAURICE PALMER, of Old Derrig, Queen's County, Ireland, Gentleman, for an invention for—"Improvements in ships or vessels of war, part of which improvements are applicable to other ships or vessels."
Letters Patent sealed.

THORNTON.
THORNTON.
24th January 1867.

179. LEACH THORNTON, of Shalford, near Guildford, in the County of Surrey, Mechanist, and EDWIN THORNTON, of Croydon, in the said County of Surrey, Mechanist, for an invention for—"Improvements in railway sleepers and chairs."
Provisional protection only.

TAYLOR.
24th January 1867.

180. THOMAS TAYLOR, of No. 7, Wellington Row, Bethnal Green, in the County of Middlesex, for an invention for—"New or improved implements or apparatus for playing games of skill and chance."
Letters Patent sealed.

BROOMAN.
24th January 1867.

181. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in working electric telegraphs, and in the construction of the instruments and manufacture of the material employed therein."—*A communication to him from abroad by Paul Antoine Marie Chauvassaignes and Jacques Paul Lambrigot, both of Paris, France.*
Letters Patent sealed.

JOHNSON.
24th January 1867.

182. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in fire-arms."—*A communication to him from abroad by Sylvester Hayward Roper, of Roxbury, Massachusetts, United States of America.*
Letters Patent sealed.

CHATER.
24th January 1867.

183. DANIEL SUTCLIFFE CHATER, of Blackawton Vicarage, in the County of Devon, Clerk, for an invention for—"Improvements in chimney tops for the prevention of smoky chimneys."
Provisional protection only.

PHILLIPS.
PHILLIPS.
PEARCE.
24th January 1867.

184. WILLIAM PHILLIPS PHILLIPS, GEORGE PHILLIPS, and DANIEL PEARCE, all of New Bond Street, in the County of Middlesex, for an invention for—"Improvements in the manufacture and construction of ecclesiastical and architectural devices and decorations."
Provisional protection only.

NEWTON.
24th January 1867.

185. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for blocking hats."—*A communication to him from abroad by William Case Griswold and Julius Sheldon, both of New York City, in the United States of America.*
Letters Patent sealed.

WOODRUFF.
24th January 1867.

186. GEORGE BALDWIN WOODRUFF, of Cheapside, in the City of London, Engineer, for an invention for—"Improvements in sewing-machinery, and in the stitches to be produced by such machinery."
Letters Patent sealed.

HUTCHINSON.
24th January 1867.

187. FRANCIS HUTCHINSON, of the York Glass Company, in the City of York, for an invention for—"An improved construction of stopper for closing bottles, jars and other articles."
Provisional protection only.

HASELTINE.
24th January 1867.

188. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved combined tack-driver and carpet-stretcher."—*A communication to him from abroad by Thomas Jebb, of Buffalo, New York, United States of America.*
Letters Patent sealed.

CLARK.
25th January 1867.

189. GEORGE CLARK, of No. 29, Arundel Street, Strand, in the County of Middlesex, for an invention for—"Improvements in guns, projectiles and cartridges, and in the construction of the same."
Provisional protection only.

DAVIES.
25th January 1867.

190. JOHN LACEY DAVIES, of the firm of John Davies and Son, of No. 4, St. Ann's Square, Manchester, in the County of Lancaster, Patent Agents, for an invention for—"Certain improvements in lamps to be employed for the purpose of illumination."—*A communication to him from abroad by Victor Cerisier, of Boulevart Sebastopol, Paris, in the Empire of France.* *Provisional protection only.*

HILL.
25th January 1867.

191. WILLIAM JAMES HILL, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"Certain improvements in breech-loading guns." *Provisional protection only.*

WOLSTENHOLME.
HOLT.
25th January 1867.

192. JOHN WOLSTENHOLME, of Radcliffe, in the County of Lancaster, and EDWARD HOLT, of the same place, for an invention for—"Improvements in safety valves." *Provisional protection only.*

BERNEY.
25th January 1867.

193. THOMAS BERNEY, of Bracon Hall, in the County of Norfolk, Clerk, for an invention for—"Improvements in constructing and applying defensive armour and also bullet-proof porthole covers for the defence of ships and other vessels, forts, batteries and other fortifications, parts of which improvements are applicable to other purposes." *Letters Patent sealed.*

MCLAUCHLAN.
25th January 1867.

194. FREDERICK HOLT MCLAUCHLAN, of Seymour Place, Wandsworth Road, in the Parish of Lambeth, in the County of Surrey, Carver and Gilder, for an invention for—"Improvements in stands, holders or tables specially adapted for portfolios, prints, large books and such like articles." *Letters Patent sealed.*

BURLEY.
25th January 1867.

195. WILLIAM BURLEY, of Birmingham, in the County of Warwick, for an invention for—"An apparatus for securing lamps for railway and other carriages." *Provisional protection only.*

GRAY.
25th January 1867.

196. WILLIAM GRAY, of the Firm of Charles Gray and Sons, of Saint Phillip's Works, Sheffield, in the County of York, for an invention for—"Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

HADDAN.
25th January 1867.

197. JOHN COOPE HADDAN, of Bessborough Gardens, Pimlico, in the County of Middlesex, Engineer, for an invention for—"Improvements in anchors." *Provisional protection only.*

PAIN.
25th January 1867.

198. WILLIAM PAIN, of Charles Street, Commercial Road, in the County of Middlesex, Carpenter and Joiner, for an invention for—"Improvements in the manufacture or construction of stringed musical instruments." *Provisional protection only.*

HASELTINE.
25th January 1867.

199. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention for—"Improvements in spinning and twisting machinery."—*A communication to him from abroad by George Chatterton, of Providence, Rhode Island, United States of America.* *Letters Patent sealed.*

CLARK.
25th January 1867.

200. JAMES CLARK, of Newton Heath, Manchester, in the County of Lancaster, India-Rubber Manufacturer, for an invention for—"Improvements in packing bales and boxes of goods." *Letters Patent sealed.*

HARTIN.
25th January 1867.

201. WILLIAM HARTIN, of Battersea, in the County of Surrey, Accountant, for an invention for—"Improvements in ruling pens." *Provisional protection only.*

NEWTON.
25th January 1867.

202. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in hammers."—*A communication to him from abroad by Joseph A. Veazie, of Boston, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

BOYS.
25th January 1867.

203. HORACE BOYS, of the Downs, Northfleet, in the County of Kent, for an invention for—"Improvements in apparatus for training hops." *Letters Patent sealed.*

STEPHENS.
26th January 1867.

204. FRANCIS STEPHENS, of the Parish of Pembridge, in the County of Hereford, Corn Factor, for an invention for—"Improvements in vermin and other traps." *Provisional protection only.*

CAREY.
26th January 1867.

205. STEPHEN CAREY, of Camperdown House, Snow's Fields, Bermondsey, in the County of Surrey, Contractor, for an invention for—"Improvements in iron channels, tramways and pavements." *Letters Patent sealed.*

HUNT.
26th January 1867.

206. BRISTOW HUNT, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of boots and shoes, and in machinery or apparatus therefor, which improvements are also equally applicable to the manufacture of 'portemonnaies,' travelling bags, parts of harness, and in fact to almost all such manufactures as require fixing, basting, cementing, sewing or stitching."—*A communication to him from abroad by Jules Constant Touzet, of Paris, France, Manufacturer.* *Letters Patent sealed.*

NODDER.
26th January 1867.

207. JOSEPH NODDER, of Sheffield, in the County of York, Britania Metal Manufacturer, for an invention for—"Improvements in infants' feeding bottles and breast exhausters." *Letters Patent sealed; no specification filed.*

JENSEN.
26th January 1867.

208. PETER JENSEN, of 4, Gordon Grove, Holland Road, Brixton, in the County of Surrey, Engineer and Patent Agent, for an invention for—"Improvements in wheel gearing."—*A communication to him from abroad by Carl Vilhelm Schröder and Frederik Julius Jörgensen, both of No.* 108, *Vesterbrogade, Copenhagen, in the Kingdom of Denmark.* *Letters Patent sealed.*

LISHMAN.
CHAMBERS.
26th January 1867.

209. MATTHEW HODGSON LISHMAN, and EDWARD CHAMBERS, of Stockton-on-Tees, in the County of Durham, Engineers, for an invention for—"Improvements in the manufacture of cores for the sockets of metal pipes, and in apparatus employed therein." *Letters Patent sealed; no specification filed.*

JONES.
HOWSON.
26th January 1867.

210. JOHN ALLCOCK JONES, Engineer, and RICHARD HOWSON, Engineer, both of Middlesbrough-on-Tees, in the County of York, for an invention for—"Improvements in puddling and other furnaces for melting, boiling or heating iron." *Provisional protection only.*

LUNDY.
26th January 1867.

211. JOHN JAMES LUNDY, of Leith, in the County of Midlothian, North Britain, Color, Grease and Chemical Manufacturer, for an invention for—"Improvements in the treatment of the residual matters resulting from and obtained in the purification and distillation of mineral or hydro-carbon oils, and also in the treatment of coal tar and various waste or other alkaline and lime substances, for the purpose of utilizing the same." *Letters Patent sealed.*

JOHNSON.
26th January 1867.

212. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in electric telegraph conductors and cables."—*A communication to him from abroad by John Montgomery Batchelder, of Cambridge, Massachusetts, United States of America.* *Letters Patent sealed.*

BERNEY.
26th January 1867.

213. THOMAS BERNEY, of Bracon Hall, in the County of Norfolk, Clerk, for an invention for—"Improvements in the construction, form and use and means of firing of projectiles, and in the construction and use and means of firing of ordnance and other arms." *Letters Patent sealed.*

LICHTENSTADT.
26th January 1867.

214. ELISABETH LICHTENSTADT, of Bermondsey New Road, in the County of Surrey, for an invention for—"Improvements in portable or other waterclosets."—*A communication to her from abroad by David Lichtenstadt, of New York, United States of America.* *Provisional protection only.*

BELLARD.
26th January 1867.

215. EDOUARD BELLARD, of Faubourg Noyon, Amiens, in the Empire of France, for an invention for—"Improvements in looms for the manufacture of silk and other velvets." *Letters Patent sealed.*

TAYLOR.
26th January 1867.

216. JACOB TAYLOR, of Liverpool, in the County of Lancaster, Cotton Broker, for an invention for—"Improved arrangements of drawing rollers used in machinery for preparing and spinning fibrous materials." *Letters Patent sealed.*

HASELTINE.
26th January 1867.

217. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in volute springs."—*A communication to him from abroad by Charles Morrill, of the City, County and State of New York, United States of America, Architect.* *Provisional protection only.*

MONCKTON.
6th January 1867.

218. EDWARD HENRY CRADOCK MONCKTON, of No. 111, Summer Hill, Birmingham, in the County of Warwick, Gentleman, for an invention for—"Improvements in the manufacture of butter." *Provisional protection only.*

HASELTINE. 26th January 1867.

219. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery for roving and spinning wool and other fibrous materials."—*A communication to him from abroad by Edwin Allen and Henry Tatem Potter, both of Norwich, Connecticut, United States of America.*
Letters Patent sealed.

WHEATSTONE. 28th January 1867.

220. CHARLES WHEATSTONE, Gentleman, of Nineteen, Park Crescent, Portland Place, London, County of Middlesex, for an invention for—"Improvements in electric telegraphs and in apparatus connected therewith." *Letters Patent sealed.*

WALDENSTROM. BASS. 28th January 1867.

221. ERIC HUGO WALDENSTROM, of Manchester, in the County of Lancaster, and ISAAC GRAY BASS, of Workington, in the County of Cumberland, Engineers, for an invention for—"Certain improvements in machinery or apparatus to be employed in the manufacture of metallic bolts." *Letters Patent sealed.*

FIELD. 28th January 1867.

222. JOHN WILLIAM PARKER FIELD, of 233, High Holborn, in the County of Middlesex, Gun Maker, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

POOLE. 28th January 1867.

223. JOHN POOLE, of 31, Riley Street, Chelsea, in the County of Middlesex, Engineer, for an invention for—"Improvements in manufacturing metallic hoops for casks or other wooden vessels or utensils, and in machinery therefor."
Letters Patent sealed.

BONNEVILLE. 28th January 1867.

224. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved machine for dressing or waxing all kinds of threads."—*A communication from Alfred Thiriez and Edouard Thiriez, two persons resident at Lille, in the Department of the Nord, Empire of France aforesaid, Manufacturers.*
Complete specification; Letters Patent sealed.

ABEL. 28th January 1867.

225. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improved appliances for horse-shoes as a substitute for 'roughing.'"—*A communication to him from abroad by Friedrich Dominick, of Berlin, Kingdom of Prussia.*
Provisional protection only.

MELLIN. ULBRICHT. 28th January 1867.

226. JULIUS EDWARD MELLIN, and CLEMENT HENRY ULBRICHT, both of the City Road, in the County of Middlesex, Engineers, for an invention for—"Improvements in the construction of boxes or apparatus to contain address cards for public distribution." *Provisional protection only.*

STALLARD. 28th January 1867.

227. WILLIAM HENRY STALLARD, of Mera Lodge, Bexley Heath, in the County of Kent, for an invention for—"Improvements in the means and mode of admitting and regulating atmospheric air or vapour to gas-burners." *Letters Patent sealed.*

HASELTINE. 28th January 1867.

228. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved machine for pulling flax and other similar crops."—*A communication to him from abroad by Samuel Whitford Tyler, of Troy, New York, United States of America.* *Letters Patent sealed.*

SNELL. 29th January 1867.

229. WILLIAM SNELL, of 16, Clement's Inn, in the City of Westminster, for an invention for—"Improvements in fireproof safes."—*A communication to him from abroad by Rufus Sanborn, Machinist, of Ripon, Wisconsin, in the United States of America.* *Complete specification; Letters Patent sealed.*

CAMBRELIN. 29th January 1867.

230. FRANCOIS CONSTANT CAMBRELIN, Engineer, of Brussels, in the Kingdom of Belgium, for an invention for—"Improvements in lighting railway carriages with gas and in the apparatus employed therein." *Letters Patent sealed.*

GREENSHIELDS. 29th January 1867.

231. JAMES GREENSHIELDS, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved compound or combination of materials to be used for the production of illuminating gas."
Letters Patent sealed; no specification filed.

HAWORTH. 29th January 1867.

232. JOHN HAWORTH, of Mode Wheel House, near the City of Manchester, Gentleman, for an invention for—"Improvements in tramways and carriages for streets and ordinary roads." *Letters Patent sealed.*

DONNET.
29th January 1867.

233. ALPHONSE DONNET, of Lyons, in the Department of the Rhône, France, Householder, for an invention for—"Improvements in the construction of water wells." *Letters Patent sealed.*

WILLIAMS.
29th January 1867.

234. THOMAS WILLIAMS, of Victoria Mill, Miles Platting (Cotton Spinner), in the County of Lancaster, for an invention for—"Certain improvements in machinery or apparatus employed in doubling cotton and other fibrous materials." * *Provisional protection only.*

HOPKINSON.
29th January 1867.

235. JOHN HOPKINSON, of Leeds, in the County of York, Colliery Manager, for an invention for—"Certain improvements in the ventilation of mines." *Letters Patent sealed.*

DICKINSON.
29th January 1867.

236. WILLIAM DICKINSON (of the firm of William Dickinson and Sons), of Blackburn, in the County of Lancaster, Cotton Manufacturers and Machinists, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed and specification filed by order.*

JACK.
COULTHURST.
29th January 1867.

237. PETER JACK, junior, and ALAMETH COULTHURST, of Nethercommon, Paisley, for an invention for—"Improvements in power looms for weaving terry and cut pile fabrics." *Letters Patent sealed.*

RITCHIE.
29th January 1867.

238. JOHN RITCHIE, of 9, Stonefield Street, Cloudesley Square, in the County of Middlesex, for an invention for —"Improvements in watch keys and other keys." *Letters Patent sealed.*

POCOCK.
29th January 1867.

239. WILLIAM WILLMER POCOCK, of Craven Street, in the City of Westminster, Architect, for an invention for—"A new or improved apparatus for holding and presenting cards and other articles for distribution." *Letters Patent sealed.*

BROOMAN.
29th January 1867.

240. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the manufacture of cartridge cases."—*A communication to him from abroad by Hippolyte Rochatte, of Paris, France.* *Provisional protection only.*

BROOMAN.
29th January 1867.

241. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the manufacture of soap."—*A communication to him from abroad by Adolphe Philippe and Gustave Fortier, both of Lyons, France.* *Provisional protection only.*

DE NÈVE.
29th January 1867.

242. EMILIUS DE NÈVE, of St. Mary at Hill, in the City of London, Chemist, and of Berlin, for an invention for—"Improvements in producing certain colors from aniline and coal tar." *Provisional protection only.*

NEWTON.
29th January 1867.

243. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for supplying steam-boilers with water and indicating the quantity supplied."—*A communication to him from abroad by Adrien Houget, Emile Bede and Laurent Roufosse, all of Verviers, in the Kingdom of Belgium.* *Letters Patent sealed.*

NEWTON.
29th January 1867.

244. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved method of casting articles in iron and steel."—*A communication to him from abroad by Nicolas Pooteeloff, of St. Petersburg, in the Empire of Russia.* *Letters Patent sealed.*

CRAVEN.
SPEEDING.
29th January 1867.

245. HIRAM CRAVEN, and JAMES SPEEDING, both of Monkwearmouth, in the County of Durham, Rope Manufacturers, for an invention for—"Improvements in apparatus and in the mode of operation for winding, tarring, sizing, polishing or putting a finish on and singling machine-spun and other yarns, in the manufacture of rope, cordage and lines of every description and material." *Letters Patent sealed.*

WISE.
29th January 1867.

246. WILLIAM LLOYD WISE, of the Office for Patents, Chandos Chambers, Adelphi, in the City of Westminster, for an invention for—"Improvements in breech-loading fire-arms, which improvements are applicable also to the conversion of muzzle-loaders into breech-loaders."—*A communication to him from abroad by Mr. Lambert Jean Joseph Ghaye, Manufacturer of Fire-arms, residing at Liege, in the Kingdom of Belgium.* *Provisional protection only.*

BROWN.
BULL.
30th January 1867.

247. JOHN HARCOURT BROWN, of Richmond, in the County of Surrey, Gentleman, and WILLIAM BULL, of Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in hats and other coverings for the head, and their bodies or foundations or in similar articles, and in the means and appliances for producing the same." *Provisional protection only.*

ENTWISTLE.
30th January 1867.

248. THOMAS CHARLES ENTWISTLE, Engineer, of New York, in the United States of America, for an invention for—"An improved apparatus for transmitting power." *Letters Patent sealed.*

PRIDEAUX.
30th January 1867.

249. THOMAS PRIDEAUX, of Sheffield, in the County of York, Hotel Keeper, for an invention for—"Improvements in the heating of malt kilns and other apparatus of a similar character, and the warming of the interiors of churches and other large buildings, which invention is also applicable to causing the consumption of smoke from open fire-places." *Provisional protection only.*

EBERSBURG.
30th January 1867.

250. ELISE VON LESNER EBERSBURG, of 25, Montpellier Street, Knightsbridge, in the County of Middlesex, for an invention for—"A new or improved article of food for infants and invalids."—*Partly a communication to her from abroad by Baron Justus Von Liebig, of Munich, Bavaria, Germany, and is partly an invention or discovery made by herself.* *Letters Patent sealed.*

ELLIS.
30th January 1867.

251. PETER ELLIS, of No. 9, Orange Court, in Liverpool, in the County of Lancaster, Architect and Civil Engineer, for an invention for—"An improved description of breech-loaded and needle-exploding fire-arms, and cartridge appropriate thereto." *Letters Patent sealed.*

FANSHAWE.
30th January 1867.

252. HENRY RICHARDSON FANSHAWE, of Mill House, Tottenham Hale, Tottenham, in the County of Middlesex, for an invention for—"Improvements in the lighting of mines, sewers, and other similar subterraneous places in which inflammable and explosive gases may form and collect, and in the lamps or lanterns and other apparatus to be used therewith." *Provisional protection only.*

CLERC.
30th January 1867.

253. LÉON CHARLES FRANÇOIS CLERC, of Saint Mary Axe, in the City of London, for an invention for—"Improvements in lamps for burning petroleum, spirit and other highly volatile liquids."—*A communication to him from abroad by Alfred Barchou, of Paris, in the Empire of France.* *Provisional protection only.*

HUNT.
30th January 1867.

254. BRISTOW HUNT, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, Gentleman, for an invention for—"An improved writing paper."—*A communication to him from abroad by Joseph Eves Hover, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

HUNT.
30th January 1867.

255. BRISTOW HUNT, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, Gentleman, for an invention for—"Improvements in gas regulators."—*A communication to him from abroad by Joseph Summers Wood, John Jackson Carberry, John Baker, junior, and Oscar Dunreath McClellan, all of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

MACARTHY.
30th January 1867.

256. SAXON MACARTHY, of 23, Fitzroy Street, Fitzroy Square, in the County of Middlesex, Artist, for an invention for—"Improvements in fastenings applicable to boots and shoes, gaiters, gloves, books, portemonnaies and other articles." *Provisional protection only.*

BROOMAN.
30th January 1867.

257. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"A new method of scouring or cleansing raw wool and woollen stuffs."—*A communication to him from abroad by Adolphe Philippe and Gustave Fortier, both of Lyons, France.* *Provisional protection only.*

DONNELLY.
30th January 1867.

258. JOHN FRETCHEVILLE DYKES DONNELLY, of South Kensington, in the County of Middlesex, Captain in the Royal Engineers, for an invention for—"An improved means of and apparatus for lighting fires." *Letters Patent sealed.*

LEE.
30th January 1867.

259. WILLIAM LEE, of Holborough, in the County of Kent, Lime Merchant, for an invention for—"Improvements in lime kilns." *Provisional protection only.*

LANDFEAR.
30th January 1867.

260. WILLIAM RODOLPHUS LANDFEAR, of Hartford, Connecticut, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Engineer, for an invention for—"An improved machine for manufacturing eyelets." *Complete specification; Letters Patent sealed.*

SIEMENS.
31st January 1867.

261. CHARLES WILLIAM SIEMENS, of No. 3, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improved methods for developing powerful electrical currents and discharges, principally applicable to the production of lights at sea, and in apparatus for determining electrical resistances in connection with such and other currents."—*Partly a communication made to him from abroad by Dr. Werner Siemens, of Berlin, Kingdom of Prussia, and partly of an invention and discovery made by himself.* *Letters Patent sealed.*

SCHOTT.
ROSENTHAL.
31st January 1867.

262. GUSTAVUS ADOLPHUS JOHN SCHOTT, and JOHN SIEGMUND ROSENTHAL, all of Bradford, in the County of York, Woollen Spinners, for an invention for—"An improved species of yarn manufactured from fibrous materials, and apparatus for its manufacture." *Letters Patent sealed.*

PADBURY.
31st January 1867.

263. EDWARD JOHN PADBURY, of Birmingham, in the County of Warwick, Lithographer, for an invention for—"An improvement or improvements in pipes for smoking." *Letters Patent sealed.*

BROOMAN.
31st January 1867.

264. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in treating and preparing silk."—*A communication to him from abroad by Adolphe Philippe and Gustave Fortier, both of Lyons, France.* *Letters Patent sealed.*

HUGHES.
31st January 1867.

265. EDWARD HUGH HUGHES, of No. 124, St. John's Street, Clerkenwell, in the County of Middlesex, Gilder and Embosser on China and Glass, for an invention for—"Improvements in gilding, bronzing and colouring engraved, embossed and cut glass, and all other kinds of glass." *Provisional protection only.*

ROBERTS.
31st January 1867.

266. HENRY ROBERTS, of Cinderford, near Newnham, in the County of Gloucester, late Chief Officer in the Mercantile East India Trade, for an invention for—"Certain improvements in setting up, arranging and actuating ships' pumps. *Provisional protection only.*

JOHNSON.
31st January 1867.

267. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in common road traction engines."—*A communication to him from abroad by Albert Schmid, of Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*

LOCKWOOD.
SHAW.
31st January 1867.

268. JOHN LOCKWOOD, of Leeds, in the County of York, Engineer, and HENRY SHAW, of the same place, Engineer and Boiler Inspector, for an invention for—"Improvements in furnaces and in the application thereof to boilers or steam generators." *Provisional protection only.*

HUGHES.
31st January 1867.

269. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"An improved machine for cutting screws."—*A communication to him from abroad by Henry Bascom Brown, of New Haven, United States of America.* *Letters Patent sealed.*

CRAIG.
31st January 1867.

270. ARCHIBALD CRAIG, of No. 9, Mincing Lane, in the City of London, Merchant, for an invention for—"Improvements in fire-grates and furnaces." *Provisional protection only.*

HALKET.
31st January 1867.

271. DAVID ALEXANDER HALKET, of the Town and County of Newcastle-on-Tyne, for an invention for—"Improvements in machinery for forging nails and spikes." *Letters Patent sealed.*

SUMMERSON.
31st January 1867.

272. THOMAS SUMMERSON, of Hope Town Foundry, Darlington, in the County of Durham, for an invention for—"Improvements in railway crossings." *Provisional protection only.*

BULLIVANT.
31st January 1867.

273. THOMAS BULLIVANT, of Ledbury Road, in the County of Middlesex, for an invention for—"Improvements in the construction of window sashes and sash frames, and in the arrangement of roller blinds thereto." *Letters Patent sealed.*

COOKE.
COOKE.
1st February 1867.

274. THOMAS COOKE, senior, and CHARLES FREDERICK COOKE, of the firm of Messieurs T. Cooke and Sons, Buckingham Works, in the City of York, Engineers, for an invention for—"An improved mode of raising water by atmospheric pressure, and apparatus connected therewith." *Provisional protection only.*

MURRAY.
1st February 1867.

275. JOHN ALEXANDER MURRAY, of the City of Manchester, in the County of Lancaster, Bricklayer, for an invention for—"Improvements in chimney-tops." *Letters Patent sealed.*

FISKEN.
FISKEN.
1st February 1867.

276. WILLIAM FISKEN, Minister of the Gospel, and DAVID FISKEN, Engineer, both of Stamfordham, in the County of Northumberland, for an invention for—"Improvements in steam-boilers and in boilers used for heating and warming purposes." *Letters Patent sealed.*

RUSSELL.
1st February 1867.

277. GEORGE RUSSELL, of Glasgow, in the County of Lanark, Engineer, for an invention for—"Improvements in steam cranes." *Letters Patent sealed.*

BAGGS.
1st February 1867.

278. ISHAM BAGGS, of High Holborn, in the County of Middlesex, Practical Chemist, for an invention for—"Improvements in obtaining and applying motive-power." *Letters Patent sealed.*

MONNET-LAVERPILIÈRE.
1st February 1867.

279. ONÉZIME MONNET-LAVERPILIÈRE, of No. 40, Rue Notre Dame des Victoires, Paris, in the Empire of France, Merchant, for an invention for—"A new agricultural fecundating agent." *Provisional protection only.*

FOSTER.
1st February 1867.

280. SAMUEL HALL FOSTER, of Leicester, Manufacturer, for an invention for—"An improved manufacture of brace fabric." *Letters Patent sealed.*

WALTON.
1st February 1867.

281. ELIZA WALTON, of No. 58, Colebrook Row, Islington, in the County of Middlesex, for an invention for—"Improvements in the manufacture of mattresses." *Letters Patent sealed.*

ASHFORD.
1st February 1867.

282. FREDERICK ASHFORD, of No. 80, Russell Street, Bermondsey, in the County of Surrey, Packing Case and Box Maker, for an invention for—"Improved means of fastening and better securing bullion boxes, boxes and other like packages used for containing and conveying other valuable commodities." *Provisional protection only.*

ERMEN.
1st February 1867.

283. HENRY ERMEN, of Pendlebury, in the County of Lancaster, for an invention for—"Certain improvements in machinery or apparatus for doubling and twisting cotton and other fibrous materials." *Letters Patent sealed; no specification filed.*

BUHRER.
PRICE.
1st February 1867.

284. JACOB BUHRER, of Munich, in the Kingdom of Bavaria, but at present residing at 13, Keppel Street, in the County of Middlesex, and ASTLEY PASTON PRICE, of 47, Lincoln's Inn Fields, in the County aforesaid, Consulting Chemist, for an invention for—"Improvements in effecting the distillation of coal, shale, wood, peat and other bituminous or carbonaceous substances." *Provisional protection only.*

NEWTON.
1st February 1867.

285. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved process for obtaining metals from their ores."—*A communication to him from abroad by John Nevious Wyckoff, of Brooklyn, in the State of New York, United States of America.* *Letters Patent sealed.*

FOLSOM.
1st February 1867.

286. NEHEMIAH TAYLOR FOLSOM, of Laconia, in the State of New Hampshire, United States of North America, Dentist, for an invention for—"Improvements in the atmospheric plates of artificial teeth." *Letters Patent sealed.*

BAUMAN.
1st February 1867.

287. FREDERIK BAUMAN, of 49, King William Street, in the City of London, for an invention for—"Improved machinery for separating the fibres of woods into shreds suitable for converting into pulp for paper making, and also for stuffing and packing various useful articles." *Letters Patent sealed.*

DARLING.
2nd February 1867.

288. JOHN DARLING, of Stane, in the County of Lanark, North Britain, for an invention for—"Improvements in reservoir penholders and in the means or apparatus for supplying ink thereto." *Letters Patent sealed.*

POOLE.
2nd February 1867.

289. JOHN POOLE, of 31, Riley Street, Chelsea, in the County of Middlesex, for an invention for—"Improvements in forming shafts, rollers, drums and wheels with india-rubber surfaces." *Provisional protection only.*

ROBINSON.
2nd February 1867.

290. JOHN GILBERT ROBINSON, of the Ainley Fire Clay Works, Elland, in the County of York, for an invention for—"Improvements in the construction and arrangement of kilns and ovens." *Letters Patent sealed.*

BRADSHAW.
2nd February 1867.

291. AARON BRADSHAW, of Accrington, in the County of Lancaster, Engineer, for an invention for—"An improved cock or tap." *Provisional protection only.*

NEWTON.
2nd February 1867.

292. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of steam generator."—*A communication to him from abroad by Eli Thayer, of Worcester, in the State of Massachusetts, Sabin Peters Pond, of Providence, and Daniel Bullard Pond, of Woonsocket, both in the State of Rhode Island, United States of America.* *Letters Patent sealed.*

SMITH.
WILSON.
2nd February 1867.

293. JOHN SMITH, of Bradford, in the County of York, Engineer, and GEORGE WILSON, of Huddersfield, in the same County, Silk Spinner, for an invention for—"Improvements in machinery or apparatus for preparing and combing wool, silk, cotton, flax, china grass or other fibrous substances." *Letters Patent sealed.*

RICHARDSON.
2nd February 1867.

294. WILLIAM RICHARDSON, of Darlington, in the County of Durham, Builder, for an invention for—"Improvements in horticultural buildings or glazed structures for horticultural and other purposes." *Letters Patent sealed.*

WRIGHT.
2nd February 1867.

295. HENRY BANKS WRIGHT, of Shelton, in the County of Nottingham, Gentleman, for an invention for—"Improved apparatus or mechanism for supplying steam-boilers with water, and for preventing their explosion." *Provisional protection only.*

CREASE.
2nd February 1867.

296. EDWARD SMITH CREASE, of Plymouth, in the County of Devon, Mining Engineer, for an invention for—"Improvements in engines or machinery for boring or working rock and other material, and in stands for such engines." *Letters Patent sealed.*

STUBBS.
2nd February 1867.

297. JOHN STUBBS, of Gravel Lane, Winsford, in the County of Cheshire, for an invention for—"Improvements in furnaces or fire-places for the prevention of smoke." *Provisional protection only.*

TONGUE.
2nd February 1867.

298. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention [for—"Improvements in self-oiling spindles for spinning, doubling and winding frames."—*A communication to him from abroad by Francis Rabbeth, of Ilion, in the County of Herkimer and State of New York, and John Edwin Atwood, of Willimantic, in the County of Windham and State of Connecticut, United States of America.* *Letters Patent sealed.*

NAPIER.
2nd February 1867.

299. ROBERT DAVID NAPIER, of 20, Church Row, Limehouse, in the County of Middlesex, for an invention for—"Improvements in breaks and apparatus for giving motion to machinery." *Letters Patent sealed.*

GREIG.
BURTON.
PARKER.
2nd February 1867.

300. DAVID GREIG, ROBERT BURTON, and FREDERICK PARKER, of the Steam Plough Works, Leeds, in the County of York, for an invention for—"Improvements in engines and machinery employed in tilling land." *Letters Patent sealed.*

VERO.
2nd February 1867.

301. CHARLES VERO, of Atherstone, in the county of Warwick, Hat Manufacturer, for an invention for—"Improvements in the manufacture of hats." *Provisional protection only.*

WARDWELL.
2nd February 1867.

302. CHARLES PINCKNEY SUMNER WARDWELL, of Gilford, in the County of Belknap and State of New Hampshire, United States of America, Pattern Maker, for an invention for—"Improvements in machines for making machine knitting needles and other needles." *Letters Patent sealed.*

HARLOW.
2nd February 1867.

303. BENJAMIN HARLOW, of Macclesfield, in the County of Chester, Mechanical Engineer, for an invention for—"Improvements in boilers or apparatus applicable to the generation of steam and to other purposes." *Provisional protection only.*

BAKER.
4th February 1867.

304. WILLIAM JAMES BAKER, of 153, Fleet Street, in the City of London, Mechanical Engineer, for an invention for—"An improved method of and apparatus for signalling between passengers, guards and drivers of railway trains." *Provisional protection only.*

BETJEMANN.
4th February 1867.

305. GEORGE WILLIAM BETJEMANN, of 36 and 38, Pentonville Road, in the County of Middlesex, for an invention for—"Improvements in the manufacture of envelope cases, blotting books and other articles, commonly called 'writing' or 'library sets,' and other similar articles." *Provisional protection only.*

COCKERELL. 4th February 1867.

306. MAURICE COCKERELL, of Hammersmith, in the County of Middlesex, for an invention for—"Improvements in locks." *Provisional protection only.*

PHILIPPI. 4th February 1867.

307. JEAN FRÉDÉRIC PHILIPPI, of 2, Rue Sᵗᵉ Appoline, Paris, Empire of France, for an invention for—"Improvements in the construction of pianofortes." *Letters Patent sealed.*

BENSON. 4th February 1867.

308. Sir JOHN BENSON, Knight, of the City of Cork, Civil Engineer, for an invention for—"Improvements in the construction of armour plates, or in the method of fixing the same to ships, forts, turrets and other similar structures, part (or parts) of which improvements are applicable to other purposes." *Provisional protection only.*

PLANT. TATTON. 4th February 1867.

309. SAMUEL PLANT, and WILLIAM TATTON, both of Sutton, near Macclesfield, in the County of Chester, for an invention for—"An improvement in the manufacture of fire lighters and artificial fuel." *Letters Patent sealed.*

DEWHIRST. DEWHIRST. DEWHIRST. 4th February 1867.

310. WILLIAM DEWHIRST, JOSEPH DEWHIRST, and THOMAS DEWHIRST, of Bradford, in the County of York, Engineers, Millwrights, Tool Makers and General Machinists, for an invention for—"Improvements in or applicable to hoists or 'sacktackles.'" *Provisional protection only.*

BULLOCH. 4th February 1867.

311. JAMES DUNWOODY BULLOCH, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"An improved self-fastening buckle or tie to be used in fastening hoops or bands of metal round bales of cotton, wool, and other merchandize capable of being packed in bales."—*A communication to him from abroad by Charles William Wailey, of New Orleans, in the United States of America.* *Letters Patent sealed.*

CAITHNESS. 4th February 1867.

312. The Right Honourable JAMES, EARL OF CAITHNESS, of Hill Street, in the County of Middlesex, for an invention for—"Improvements in floating lights or beacons." *Provisional protection only.*

VAN DUSEN. 4th February 1867.

313. CONRAD VAN DUSEN, of the City of London, Minister of the Gospel, for an invention for—"Printing names of subscribers on newspapers and other periodicals, and other printing purposes, known or called 'Campbell's addressing machine.'"—*A communication to him from abroad by James Alexander Campbell, of the Town of Whitby, Canada West, North America, Printer.* *Provisional protection* NOT *granted.*

HARRISON. 4th February 1867.

314. JOSEPH JOHN HARRISON, of 2, Ada Terrace, Great Clowes Street, Broughton, Manchester, in the County of Lancaster, Gentleman, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

LIEBICH. 4th February 1867.

315. IMMANUEL LIEBICH, of Buckingham Road, Brighton, for an invention for—"Improvements in apparatus used when learning and when practising to play on the pianoforte and other keyed musical instruments." *Letters Patent sealed.*

HASELTINE. 4th February 1867.

316. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in weavers' harness."—*A communication to him from abroad by Cullen Whipple, of Cranston, Rhode Island, United States of America.* *Letters Patent sealed.*

PARSONS. 5th February 1867.

317. PERCEVAL MOSES PARSONS, of Blackheath, in the County of Kent, Civil Engineer, for an invention for—"Improvements in the permanent way of railways and in screw bolts for the same, which latter are applicable to other similar purposes." *Letters Patent sealed.*

LUCENA. 5th February 1867.

318. STEPHEN LANCASTER LUCENA, of Windmill Hill, Enfield, in the County of Middlesex, Solicitor, for an invention for—"An improvement in horse shoes by constructing the shoes in such manner as that the horse can immediately be roughed by the person using it, without the shoes being removed from the feet of the horse, and without the necessity of having recourse to any smith or farrier for that purpose, and that even while the horse is in actual use on the road or otherwise." *Letters Patent sealed.*

PLEWS. 5th February 1867.

319. JOHN PLEWS, of 3, Bucklersbury, in the City of London, Civil Engineer, for an invention for—"Improvements in the chambers of breech-loading and other fire-arms and ordnance." *Provisional protection only.*

CRAVEN.
5th February 1867.

320. THOMAS CRAVEN, of Idle, near Leeds, in the County of York, Overlooker, for an invention for—"An improvement in spinning frames." *Letters Patent sealed.*

JOHNSON.
5th February 1867.

321. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in metallic cases for preserved food."—*A communication to him from abroad by Joseph Jean Marie Rebours, of Paris, in the Empire of France.* *Provisional protection only.*

BALLOUHEY.
5th February 1867.

322. JOSEPH BALLOUHEY, of Passavant, Haute Saone, in the Empire of France, Glass Manufacturer, for an invention for—"An improved process for vitrifying iron, cast iron and steel." *Provisional protection only.*

NEWTON.
5th February 1867.

323. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved process of making foil of lead coated with tin."—*A communication to him from abroad by William Woodman Huse, of New York City, in the United States of America.* *Letters Patent sealed.*

TONGUE.
5th February 1867.

324. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for drying yarn."—*A communication to him from abroad by Hugh Whitehill, of Newburgh, in the County of Orange and State of New York, United States of America.* *Letters Patent sealed.*

WRIGHT.
COBLEY.
6th February 1867.

325. JAMES WRIGHT, Civil Engineer, and THOMAS COBLEY, Metallurgist, both of 12, Copthall Court, Throgmorton Street, City of London, for an invention for—"Improvements in the treatment of ores of lead for the purpose of obtaining salts and colours of the same." *Letters Patent sealed.*

BOX.
6th February 1867.

326. JOHN BOX, of No. 40, Arundel Gardens, in the Parish of Kensington, in the County of Middlesex, Civil Engineer, for an invention for—"New or improved means or apparatus for opening and closing the passage through cylinders, applicable to fire-arms of every description."—*A communication to him from abroad by François Felix Challeton de Breughat, of Corbeil, in the Empire of France, Engineer.* *Provisional protection only.*

GEDGE.
6th February 1867.

327. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved paint."—*A communication to him from abroad by Jean Baptiste Terrin, Lucien Lassabe and Louis Soles, junior, all of 39, Faubourgh St. Martin, Paris, France.* *Provisional protection* NOT *granted.*

BARR.
BLOXHAM.
6th February 1867.

328. DAVID BARR, of Cherry Street, Birmingham, in the county of Warwick, Agent, and JOHN BLOXHAM, of New Street, Aston New Town, Birmingham, Commercial Clerk, for an invention for—"Improved window and shutter fastenings." *Provisional protection only.*

FOXLEY.
6th February 1867.

329. JOHN FOXLEY, of Stony Stratford, in the County of Bucks, Brickmaker, for an invention for—"Improvements in bricks whereby to facilitate the attachment or fastening of anything to walls of such bricks or in which such bricks are inserted." *Provisional protection only.*

WALLER.
6th February 1867.

330. GEORGE ARTHUR WALLER, of the City of Dublin, Engineer, for an invention for—"Improvements in constructing and working apparatus for filtering beer and other liquids." *Letters Patent sealed.*

BROOMAN.
6th February 1867.

331. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the city of London, Patent Agents, for an invention for—"A new method of manufacturing and applying artificial pearls or beads."—*A communication to him from abroad by Emmanuel Meyer, of Paris, France.* *Letters Patent sealed.*

RIGBY.
6th February 1867.

332. THOMAS RIGBY, of Bradmore, near Wolverhampton, in the county of Stafford, Gun Lock Maker, for an invention for—"Improvements in gun and pistol locks." *Provisional protection only.*

DEAN.
WHEELER.
6th February 1867.

333. HENRY DEAN, and GEORGE ALFRED WHEELER, of Wood End, in the County of Southampton, Surveyors, for an invention for—"Improvements in candlesticks and candle holders." *Provisional protection only.*

ALLEY.
6th February 1867.

334. STEPHEN ALLEY, of the firm of Neilson Brothers, of Glasgow, in the County of Lanark, North Britain, Engineers, for an invention for—"Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analagous purposes." *Letters Patent sealed.*

RIGG.
6th February 1867.

335. WILLIAM RIGG, of Cannon Street, in the City of London, for an invention for—"Improvements in means or apparatus employed for securing oil or other liquids in cans and other vessels, which improvements also facilitate the drawing off of such liquids from the vessels in which they are contained." *Letters Patent sealed.*

NEWTON.
6th February 1867.

336. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in bobbins for spinning machinery."—*A communication to him from abroad by the Metallic Bobbin Company (Incorporated), of New York City, in the United States of America.* *Letters Patent sealed.*

GRAHAM.
6th February 1867.

337. JAMES GRAHAM, of Manchester Road, Warrington, in the County of Lancaster, for an invention for—"Improvements in the manufacture of spelter from zinc ashes and refuses obtained when coating iron with zinc." *Letters Patent sealed.*

BROWN.
6th February 1867.

338. ANDREW BETTS BROWN, of the Vauxhall Iron Works, Wandsworth Road, in the county of Surrey, for an invention for—"Improvements in drilling machines." *Letters Patent sealed.*

PRANGLEY.
6th February 1867.

339. WILLIAM PRANGLEY, of Salisbury, in the county of Wilts, for an invention for—"Improvements in apparatus employed in athletic exercises." *Provisional protection only.*

ROSENAUER.
6th February 1867.

340. FREDERIK ROSENAUER, of No. 10, Bury Court, St. Mary Axe, in the City of London, Merchant, for an invention for—"Improvements in starching or stiffening yarns, threads, woven fabrics and tissues."—*A communication to him from abroad by John Gaspard Meyer-Rauschenbach, of Munich, in the Kingdom of Bavaria, Civil Engineer.* *Letters Patent sealed.*

HOAR.
6th February 1867.

341. JOHN SHERMAN HOAR, of the State of Massachusetts, of the United States of America, for an invention for—"New and useful improvements in bench vices." *Complete specification; Letters Patent sealed.*

RAMSBOTTOM.
7th February 1867.

342. JOHN RAMSBOTTOM, of Crewe, in the County of Chester, Engineer, for an invention for—"Improvements in machinery and apparatus for supporting, moving and forging heavy masses of metal." *Letters Patent sealed.*

BEATTIE.
7th February 1867.

343. WILLIAM GEORGE BEATTIE, of South Bank, Surbiton, in the County of Surrey, Engineer, for an invention for—"Improvements in slide valves." *Letters Patent sealed.*

PAIN.
CORROY.
7th February 1867.

344. GEORGE EDWARD PAIN, of 121, High Street, Camden Town, and CHARLES CORROY, of 66, Dean Street, Soho, both in the county of Middlesex, for an invention for—"Improvements in the preparation of oils for illuminating, lubricating, and other purposes for which they may be applicable." *Letters Patent sealed.*

HOWARD.
7th February 1867.

345. SAMUEL HOWARD, of Luton, in the County of Bedford, Hat and Bonnet Block Maker, for an invention for—"Certain improvements in machinery or apparatus for pressing and shaping hats, bonnets or coverings for the head, made from straw or other materials." *Letters Patent sealed.*

GREEN.
LAYCOCK.
7th February 1867.

346. ROBERT ELLIS GREEN, of Church, near Accrington, in the County of Lancaster, and WILLIAM LAYCOCK, of the same place, for an invention for—"Improvements in printing on textile fabrics." *Letters Patent sealed.*

CARRINGTON.
7th February 1867.

347. WILLIAM THOMAS CARRINGTON, of Perth, in the county of Perth, North Britain, for an invention for—"An improved steam roller, also applicable as a traction engine and portable engine." *Letters Patent sealed.*

SIDDAWAY.
7th February 1867.

348. ENOCH SIDDAWAY, of West Bromwich, in the County of Stafford, Manufacturer, for an invention for—"Improvements in charcoal box smoothing irons." *Letters Patent sealed.*

YORK.
7th February 1867.

349. HENRY KINNAIRD YORK, of the Grange Town Iron Works, Cardiff, for an invention for—"Improvements in apparatus for heating with hot water." *Provisional protection only.*

LEADER.
7th February 1867.

350. FREDERICK CHRISTOPHER LEADER, of 71, Opera Collonade, Haymarket, in the County of Middlesex, for an invention for—"Improvements in venetian blinds."
Letters Patent sealed.

CLARK.
7th February 1867.

351. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the mode of attaching teeth to saws."—*A communication to him from abroad by Warren P. Miller, of San Francisco, in the County of San Francisco, State of California, United States of America.* *Letters Patent sealed.*

CLARK.
7th February 1867.

352. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in mechanical movements to be applied to automaton toys and hobby horses."—*A communication to him from abroad by William Farr Goodwin, of the City of Washington, District of Columbia, and Henry Shotwell Cohu, of New York City, both in the United States of America.* *Letters Patent sealed.*

CONISBEE.
7th February 1867.

353. WILLIAM CONISBEE, of Herbert's Buildings, Waterloo Road, in the County of Surrey, Engineer, for an invention for—"Improved means of securing, fastening, or 'locking up' type and other printing surfaces in 'chases' for printing purposes, and of securing what are known as 'formes' upon the printing tables."
Letters Patent sealed.

FALK.
7th February 1867.

354. HERMAN EUGENE FALK, of Meadowbank, Winsford, in the County of Chester, and of Liverpool, in the County Palatine of Lancaster, Salt Proprietor, for an invention for—"Improvements in steam-boiler, saltpan and other furnaces or fire-places, for the better combustion of fuel." *Letters Patent sealed.*

KILBEE.
8th February 1867.

355. WILLIAM KILBEE, of Smallheath, in the County of Warwick, for an invention for—"Certain improvements in breech-loading fire-arms."
Provisional protection only.

FIRTH.
8th February 1867.

356. EDWIN FIRTH, of Dewsbury, in the County of York, Manufacturer, for an invention for—"An improved fabric in imitation of the skins of animals, suitable for the manufacture of ladies' mantles, carriage rugs and other articles."
Letters Patent sealed.

HAINES.
8th February 1867.

357. MICHAEL JOHN HAINES, of Bath, in the County of Somerset, for an invention for—"Improvements in the manufacture of leather straps and driving bands."
Letters Patent sealed.

LOSH.
8th February 1867.

358. WILLIAM SEPTIMUS LOSH, of Wreay Syke, in the County of Cumberland, Esquire, for an invention for—"A method of manufacturing a salt or salts of ammonia." *Letters Patent sealed.*

ORMSBY.
8th February 1867.

359. ARTHUR ORMSBY, of 19, Parliament Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in the collection and storage for distribution of rain water." *Complete specification; Letters Patent sealed.*

SIBLEY.
8th February 1867.

360. THOMAS SIBLEY, of Ashton-under-Lyne, in the County of Lancaster, Machinist, for an invention for—"Improvements in the construction of machines for washing and churning." *Letters Patent sealed.*

FLETCHER.
8th February 1867.

361. HENRY ALLASON FLETCHER, of the Lowca Engine Works, near Whitehaven, for an invention for—"Improvements in machinery or apparatus for boring and planing metals." *Letters Patent sealed.*

JOHNSON.
8th February 1867.

362. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in propellers for ships, boats and other vessels."—*A communication to him from abroad by Auguste Arban the elder, and the Marquis Marie Joseph Antoine Ernest De Lagrange, of Paris, in the Empire of France.* *Complete specification; Letters Patent sealed.*

DEFRIES.
8th February 1867.

363. DANIEL NATHAN DEFRIES, of Euston Road, in the County of Middlesex, Consulting Gas Engineer, for an invention for—"Improvements in gas-burners."
Provisional protection only.

GAIFFE.
LALANCE.
8th February 1867.

364. PIERRE ELIE GAIFFE, and AMÉDÉE ARTHUR LALANCE, of 29, Boulevart St. Martin, Paris, Engineers, for an invention for—"A mechanical process of electro-engraving by means of an electro-magnetic engraving machine."
Letters Patent sealed.

JONES.
8th February 1867.

365. WILLIAM JONES, of Wolverhampton, in the County of Stafford, Machinist, for an invention for—"Improvements in machinery for manufacturing the junctions of gas, water, steam and other pipes." *Letters Patent sealed.*

GILL.
8th February 1867.

366. THOMAS GILL, of the firm of Todd and Gill, Summer Bridge, near Ripley, in the County of York, Machinist, for an invention for—"Improvements in twisting or doubling frames for yarns." *Letters Patent sealed.*

STANTON.
9th February 1867.

367. JOHN STANTON, Gun Lock Manufacturer, of 13, Clifton St., Wolverhampton, in the County of Stafford, for an invention for—"An improved self-acting safety gun lock." *Letters Patent sealed.*

HAWORTH.
WELCH.
9th February 1867.

368. RICHARD HAWORTH, Spinner and Manufacturer, and JOHN WELLINGTON WELCH, Agent, both of the city of Manchester, for an invention for—"Improvements in machinery for sizing, dressing and beaming yarn and thread." *Letters Patent sealed.*

DAWS.
9th February 1867.

369. GEORGE DAWS, of Penge, in the County of Surrey, for an invention for—"Improvements in machinery or apparatus for opening, closing, locking and unlocking cart and other gates on railway level crossings, together with signals in connection therewith." *Letters Patent sealed.*

JONES.
9th February 1867.

370. THOMAS REGINALD JONES, of Liverpool, in the County of Lancaster, Saw Mill Proprietor, for an invention for—"An improved combined bench and desk." *Provisional protection only.*

BRIGHAM.
BICKERTON.
9th February 1867.

371. JOHN BRIGHAM, and RICHARD BICKERTON, of the Town and Borough of Berwick-on-Tweed, Implement Makers, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

KIRBY.
9th February 1867.

372. EDMUND ADOLPHUS KIRBY, of Gordon Square, in the County of Middlesex, Doctor of Medicine, for an invention for—"A new or improved portable miniature dispensary and instrument case, for the use of medical practitioners and for general purposes." *Provisional protection only.*

HEYWOOD.
HINCHCLIFFE.
9th February 1867.

373. EDWIN HEYWOOD, of Sackville Street, in the City of Manchester, Stuff Finisher, and EDWARD HINCHCLIFFE, of 26, York Street, in the said City of Manchester, Manufacturer, for an invention for—"Improvements in means or apparatus employed in producing fancy or figure weavings." *Provisional protection only.*

LEONARDT.
9th February 1867.

374. FRIEDRICH LEONARDT, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in and additions to boxes for containing metallic pens and other small articles." *Provisional protection only.*

BUHRER.
9th February 1867.

375. JACOB BUHRER, of Munich, in the kingdom of Bavaria, but now of Keppel Street, in the County of Middlesex, for an invention for—"Improvements in generating steam and in apparatus employed therein." *Provisional protection only.*

JAMES.
9th February 1867.

376. ROBERT JAMES, of Poole, in the County of Dorset, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

DIXON.
9th February 1867.

377. CHARLES WILLIAM DIXON, of Wickham Market, in the County of Suffolk, Engineer, for an invention for—"Improvements in mounting wheels on axles, the same being specially applicable to railway wheels." *Letters Patent sealed.*

GORGES.
9th February 1867.

378. EDOUARD GORGES, of Neuilly, in the Empire of France, at present residing at Panton Street, in the County of Middlesex, for an invention for—"Improvements in preserving meat, poultry and game." *Letters Patent sealed.*

CLARK.
9th February 1867.

379. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in preserving animal or vegetable matters, whether fluid or solid, in a wholesome and edible condition, without material loss or change of their natural flavor."—*A communication to him from abroad by Lewis Hobart Spear, of Braintree, in the County of Orange, State of Vermont, United States of America.* *Letters Patent sealed.*

GRANT.
9th February 1867.

380. ALONZO GALORD GRANT, of No. 25, Osnaburgh Street, Regent's Park, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of and apparatus for exhibiting moving and other pictures." *Provisional protection only.*

MULLINER.
11th February 1867.

381. ROBERT BOUVERIE MULLINER, of Liverpool, in the County of Lancaster, Coach Builder, for an invention for—"Improvements in the construction of shoes for horses." *Provisional protection only.*

COLLINS.
11th February 1867.

382. PHINEAS DAVIS COLLINS, of No. 4, Little St. James St., St. James, in the County of Middlesex, for an invention for—"A self-closing bottle stopper and key." *Provisional protection only.*

KIDD.
11th February 1867.

383. GEORGE HUGH KIDD, of Merrion Square, in the City of Dublin, Doctor of Medicine, for an invention for—"Improvements in apparatus for regulating the supply of water to cisterns, and for preventing the bursting of water pipes." *Letters Patent sealed.*

THOMPSON.
11th February 1867.

384. ROBERT THOMAS THOMPSON, of Berwick Street, St. James, in the County of Middlesex, Foreman Tailor, for an invention for—"Improvements in studs and buttons and their fastenings." *Letters Patent sealed.*

NEWTON.
11th February 1867.

385. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres."—*A communication to him from abroad by Benjamin Chew Tilghman, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

RAMSBOTTOM.
12th February 1867.

386. JOHN RAMSBOTTOM, of Crewe, in the County of Chester, Engineer, for an invention for—"Improvements in machinery for transferring engines, carriages and waggons, from one line of rails to another." *Letters Patent sealed.*

MANICO.
12th February 1867.

387. EDWARD MANICO, of Bedford Street, Strand, in the County of Middlesex, Lieutenant Royal Marines, for an invention for—"Improved means for raising sand or shingle covered by the tide to the level of high water, and therewith forming embankments for the construction of sea works." *Letters Patent sealed.*

STRATFORD.
12th February 1867.

388. WILLIAM STRATFORD, of Lincoln Street, Bow Road East, in the County of Middlesex, Engineer, for an invention for—"Improvements in carriages or vehicles, and in securing or harnessing draught animals thereto." *Provisional protection only.*

BERNIER.
12th February 1867.

389. EUGENE HENRI BERNIER, of Rue Corbeau, Paris, in the Empire of France, Civil Engineer, for an invention for—"An improved safety apparatus for raising and lowering heavy bodies." *Complete specification; Letters Patent sealed.*

BOOTH.
12th February 1867.

390. JOHN BILLINGTON BOOTH, of Preston, in the County of Lancaster, for an invention for—"Improvements in carding-engines."—*A communication to him from abroad by Seldon L. Crockett and Benjamin T. Mills, of Lowell, Massachusetts, U. S. of America.* *Letters Patent sealed.*

SIMPSON.
12th February 1867.

391. Sir JAMES YOUNG SIMPSON, Baronet, of Strathavon, of No. 52, Queen Street, Edinburgh, in the County of Midlothian, North Britain, for an invention for—"Improvements in the utilizing of mineral and other oils for the production of heat and for illuminating purposes." *Provisional protection only.*

JOHNSON.
12th February 1867.

392. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Edmond Couturier, of Paris, in the Empire of France.* *Letters Patent sealed.*

CLARK.
12th February 1867.

393. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for obtaining and applying motive-power."—*A communication to him from abroad by Gerolamo Cavanna, Mechanical Engineer, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

TOWERS.
12th February 1867.

394. WILLIAM HENRY TOWERS, of the City, County and State of New York, of the United States of America, for an invention for—"An improved process of preparing raw hide for the manufacture of various articles." *Complete specification; Letters Patent sealed.*

BACON.
12th February 1867.

395. Lieutenant FRANCIS BACON, of the Royal Marine Artillery, of Wymondham Rectory, in the County of Leicester, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

NEWTON. 12th February 1867.

396. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by Elias Howe, junior, of the City of New York, in the United States of America.*
Letters Patent sealed.

GRIERSON. McELROY. 12th February 1867.

397. HENRY HOULDSWORTH GRIERSON, of Manchester, in the County of Lancaster, Engineer, and JOHN McELROY, of Sale, in the county of Chester, Clerk, for an invention for—"Improvements in governors for steam and other motive-power engines." *Letters Patent sealed.*

CLISSOLD. 12th February 1867.

398. WILLIAM CLISSOLD, of Dudbridge Works, near Stroud, in the County of Gloucester, Engineer, for an invention for—"An improved construction of tentering machine." *Letters Patent sealed.*

PATERSON. 13th February 1867.

399. ALEXANDER JOHN PATERSON, of Edinburgh, in the County of Midlothian, North Britain, Gentleman, for an invention for—"Improvements in fire-arms, ordnance and projectiles." *Letters Patent sealed.*

WESTWOOD. BAILLIE. 13th February 1867.

400. JOSEPH WESTWOOD, of Tredegar House, Bow, in the County of Middlesex, Engineer, and ROBERT BAILLIE, of Leyton, in the County of Essex, Engineer, for an invention for—"Improvements in iron safes and for doors for the same and other purposes." *Letters Patent sealed.*

WESTWOOD. BAILLIE. 13th February 1867.

401. JOSEPH WESTWOOD, of Tredegar House, Bow, in the County of Middlesex, Engineer, and ROBERT BAILLIE, of Leyton, in the County of Essex, Engineer, for an invention for—"Improvements in iron piles and columns."
Letters Patent sealed.

GEDGE. 13th February 1867.

402. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Certain improvements in steam-boilers or generators."—*A communication to him from abroad by John Lochhead and Charles Arthur Mathieu, both of San Francisco, California.* *Letters Patent sealed.*

CLARK. 13th February 1867.

403. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in machinery for moulding and pressing bricks."—*A communication to him from abroad by Emery Ross Gard, of Chicago, in the County of Cook and State of Illinois, United States of America.*
Letters Patent sealed.

HOUFE. 13th February 1867.

404. HENRY HOUFE, of Tollington Park, Upper Holloway, in the County of Middlesex, for an invention for—"Improvements in outside lamps or lanterns for shop fronts or other similar places." *Provisional protection only.*

MACK. 13th February 1867.

405. SAMUEL DWIGHT MACK, of the City, County and State of New York, U. S. of America, for an invention for—"Improvements in machinery for cleaning wheat and other grain." *Letters Patent sealed.*

JONES. 13th February 1867.

406. WILLIAM JONES, of Liverpool Street, King's Cross, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in lamps."
Letters Patent sealed.

NEWTON. 13th February 1867.

407. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of and apparatus for taking photographic portraits, pictures or representations."—*A communication to him from abroad by Adolphe Guillaume Larauza, of Brussels, in the Kingdom of Belgium.* *Provisional protection only.*

OSBORNE. 13th February 1867.

408. SAMUEL OSBORNE, of No. 8, Castle Street, Falcon Square, London, for an invention for—"Improvements in the manufacture of stays, corsets and riding belts, and other similar articles." *Letters Patent sealed.*

DAVIS. SALKELD. 13th February 1867.

409. HENRY ALBERT DAVIS, of No. 3, Goswell Terrace, in the County of Middlesex, and SAMUEL JOHN SALKELD, of No. 45, Little Britain, in the City of London, for an invention for—"An improved apparatus for drawing liquids from casks and other vessels." *Provisional protection only.*

THOMPSON. 14th February 1867.

410. JOHN THOMPSON, of Ardwick, in the City of Manchester, Machinist, for an invention for—"Improvements in machinery for cutting and polishing metals."
Letters Patent sealed.

WALTON. HARLOW. 14th February 1867.

411. JOSEPH WALTON, of Wilmslow, in the County of Cheshire, Auctioneer and Valuer, and ROBERT HARLOW, of Heaton Norris, in the Borough of Stockport, in the County of Lancaster, Brassfounder, for an invention for—"Improvements in apparatus for tilting barrels on any description of stillage." *Letters Patent sealed.*

DUFRENÉ. 14th February 1867.

412. HECTOR AUGUSTE DUFRENÉ, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, Civil Engineer, for an invention for—"An improved holder for railway and other tickets, part of which improved holder is applicable to other purposes."—*A communication from Monsieur Charles Cotte, a person resident at Digne, in the Empire of France.* *Provisional protection only.*

DUFRENÉ. 14th February 1867.

413. HECTOR AUGUSTE DUFRENÉ, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, Civil Engineer, for an invention for—"An improvement in railway and other tickets."—*A communication from Monsieur Charles Cotte, a person resident at Digne, in the Empire of France.* *Provisional protection* NOT *granted.*

TOEPKEN. 14th February 1867.

414. JOHN VICTOR TOEPKEN, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"An improved machine or machinery for packing a certain kind or description of friction match." *Letters Patent sealed.*

IRELAND. 14th February 1867.

415. GEORGE IRELAND, of Handsworth, in the County of Stafford, Manager of Works, for an invention for—"Improvements in cruet frames, liquor frames and other frames for holding bottles and vessels, and in the bottles and vessels to be held by the said frames." *Provisional protection only.*

TENNISWOOD. 14th February 1867.

416. DAVID TENNISWOOD, of the City of York, Boot and Shoe Maker, for an invention for—"Improvements in the manufacture of boot and shoe toe-pieces, and in the machinery or apparatus to be employed therein." *Letters Patent sealed.*

WRIGHT. 14th February 1867.

417. GEORGE WILLIAM WRIGHT, of 134, Bishopsgate Street Without, for an invention for—"Improvements in street gutters and sinks." *Provisional protection only.*

GREENWOOD. KEATS. 14th February 1867.

418. THOMAS GREENWOOD, of Leeds, in the County of York, Machinist, and JOHN KEATS, of Leek, in the County of Stafford, Boot and Shoe Manufacturer, for an invention for—"Improvements in machinery for the manufacture of boots, shoes and other coverings for the feet." *Letters Patent sealed.*

GEORGE. 15th February 1867.

419. RICHARD GEORGE, of Bridge Street, Kilburn, in the County of Middlesex, for an invention for—"Improvements in cinder and other shovels." *Letters Patent sealed.*

KERR. MCGEE. 15th February 1867.

420. JOHN PINKERTON KERR, Manufacturer, and WILLIAM MCGEE, Engineer, both of Paisley, in the County of Renfrew, North Britain, for an invention for—"Improvements in chain beaming apparatus." *Letters Patent sealed.*

KNOWLES. WILDING. 15th February 1867.

421. WILLIAM JOHN KNOWLES, and JOHN EDWARD WILDING, both of Blackburn, in the County of Lancaster, for an invention for—"Improvements in rollers for wringing and mangling." *Provisional protection only.*

SHAW. 15th February 1867.

422. ROBERT SHAW, of Preston, in the County of Lancaster, Blacksmith, for an invention for—"Improvements in the construction of motive-power engines." *Provisional protection only.*

CAPPER. 15th February 1867.

423. JASPER CAPPER, of Waterloo, near Liverpool, in the County of Lancaster, Accountant, for an invention for—"An improved construction of chimney top or cap." *Provisional protection only.*

DUCHAMP. 15th February 1867.

424. PIERRE DUCHAMP, of Lyons, Rue de la Vielle Monnaie, 30, Merchant, for an invention for—"An improved apparatus for drawing off liquids and supplying them to bottles and other receptacles." *Provisional protection only.*

LAMBLE. 15th February 1867.

425. JAMES LAMBLE, of Southampton, in the County of Hants, Plumber and Painter, for an invention for—"A new or improved composition for the coating and preservation of ships' bottoms." *Letters Patent sealed.*

COMBE. 15th February 1867.

426. JOHN COMBE, of Starbeck, York, Engineer, for an invention for—"Improvements in machinery for drawing fibrous substances in drawing and spinning frames." *Letters Patent sealed.*

NICHOLSON. 15th February 1867.

427. THOMAS WILLIAM NICHOLSON, of No. 3, Bell Yard, Gracechurch Street, in the City of London, Lithographer, for an invention for—"Improvements in and adaptation of cylinder printing machines to the double purpose of letter press and lithography, also a new mode of damping litho stones, and a new mode of registering and pointing in such machines." *Letters Patent sealed.*

FERRABEE. 15th February 1867.

428. JAMES FERRABEE, of Brimscombe Port Mills, near Stroud, in the County of Gloucester, Engineer, for an invention for—"Improved machinery for feeding carding-machines." *Letters Patent sealed.*

NEWTON. 15th February 1867.

429. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of water meter."—*A communication to him from abroad by Robert Westcott and Job Symmes Crane, of Elizabeth, in the State of New Jersey, United States of America.* *Letters Patent sealed.*

LORD. 16th February 1867.

430. EDWARD LORD, of Todmorden, in the County of York, Machine Maker, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

SHAW. 16th February 1867.

431. JOHN SHAW, of Oldham, in the County of Lancaster, for an invention for—"Certain improvements in machinery or apparatus for spinning and doubling cotton or other fibrous materials." *Provisional protection only.*

CARTER. 16th February 1867.

432. JAMES CARTER, of Dunfermline, in the County of Fife, North Britain, for an invention for—"Improvements in opening, closing and securing windows, doors and shutters, which improvements are also applicable to the opening, closing and securing the portholes of ships, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

WHITE. 16th February 1867.

433. GEORGE WHITE, of 68, Queen Street, Cheapside, in the City of London, Patent Agent, for an invention for—"Improvements in levelling and certain other mathematical instruments."—*A communication to him from abroad by Mr. François Delsarte, of Paris, France.* *Provisional protection only.*

COOPER. 16th February 1867.

434. HENRY COOPER, of Bunhill Row, in the City of London, Cabinet Maker, for an invention for—"An improved construction of dining table." *Provisional protection only.*

PARKES. 16th February 1867.

435. JAMES PARKES, of Stockport, in the County of Chester, Gentleman, for an invention for—"An improved instrument for giving answers to selected questions." *Letters Patent sealed.*

STEVENS. 16th February 1867.

436. EBENEZER STEVENS, of Pentonville Road, in the County of Middlesex, for an invention for—"Improvements in means or apparatus employed to secure coal plates, trap doors and other similar articles." *Letters Patent sealed.*

STEVENS. 16th February 1867.

437. EBENEZER STEVENS, of Pentonville Road, in the County of Middlesex, for an invention for—"Improvements in cans, kettles and other vessels having handles applied thereto." *Letters Patent sealed.*

HODSON. 16th February 1867.

438. RICHARD HODSON, of West Ham, in the County of Essex, Engineer, for an invention for—"Improvements in machines for punching iron or other metal plates." *Letters Patent sealed.*

HILL. WILBERFORCE. 18th February 1867.

439. WILLIAM HILL, and HENRY CHARLES WILBERFORCE, both of the City of York, for an invention for—"Improvements in gas-cooking apparatus, and in steaming, baking, boiling and roasting apparatus." *Letters Patent sealed.*

THWAITES. CARBUTT. STURGEON. 18th February 1867.

440. ROBINSON THWAITES, of Bradford, in the County of York, Engineer, EDWARD HAMER CARBUTT, of Bradford, in the County of York, Engineer, and JOHN STURGEON, of Burley, near Leeds, in the County of York, Engineer, for an invention for—"Improvements in hammers to be worked by steam or other fluid." *Letters Patent sealed.*

DILLON. 18th February 1867.

441. Count ARTHUR DILLON, Proprietor, of 29, Boulevart St. Martin, Paris, for an invention for—"Improvements in apparatus for raising stranded and sunken vessels." *Letters Patent sealed.*

HARFIELD. 18th February 1867.

442. WILLIAM HORATIO HARFIELD, of Royal Exchange Buildings, in the City of London, for an invention for—"Improvements in the construction of windlasses." *Letters Patent sealed.*

NEWTON.
18th February 1867.

443. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in corsets."—*A communication to him from abroad by Mademoiselle Marie Louise Changeur, of Boulevard Beaumarchais, Paris, in the Empire of France.*
Provisional protection only.

WENNER.
19th February 1867.

444. CHARLES WENNER, of Horwich, in the County of Lancaster, Civil Engineer, for an invention for—"Certain improvements in apparatus for preventing 'down draught' in chimnies, which may also be applied for the purpose of ventilation."
Letters Patent sealed.

REDFERN.
19th February 1867.

445. GEORGE FREDERICK REDFERN, of the General Patent Office, 4, South Street, Finsbury, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in breech-loading needle fire-arms, and in cartridges for the same."—*A communication to him from abroad by Messieurs Felix Allemano and Alberto Barelli, of Turin, in the Kingdom of Italy.* *Letters Patent sealed.*

FOUSSET.
19th February 1867.

446. ANNE AMÉLIE FOUSSET, of No. 25, Rue des Acacias, Paris, in the Empire of France, Spinster. for an invention for—"Improvements in the manufacture and treatment of varnished or patent leather, oil or varnished cloth and other like materials." *Letters Patent sealed; no specification filed.*

HASCHKE.
19th February 1867.

447. HENRY HASCHKE, of Watling Street, in the City of London, Commission Agent, for an invention for—"Improvements in breech-loading fire-arms and in cartridges for the same."—*A communication to him from abroad by Leon Lamblin, Christian Lenders and Toussaint Theate, all of Liege, Belgium.*
Provisional protection only.

BENIEST.
19th February 1867.

448. AMAND BENIEST, of the City of Ghent, in the Kingdom of Belgium, for an invention for—"Improvements in governors for regulating the movements of steam-engines that they never can deviate from the speed required."
Provisional protection only.

ALDER.
19th February 1867.

449. HENRY ALDER, of 32, Grange Road, Edinburgh, for an invention for—"Improvements in gas meters." *Provisional protection only.*

BRASIER.
19th February 1867.

450. EDWARD BRASIER, of New Cross, in the County of Surrey, Engineer, for an invention for—"Improvements in machinery for scutching flax or other fibrous materials, and also for opening and straightening fibrous materials (which have been previously made up into yarns and threads), in order to prepare the same for spinning and other purposes." *Letters Patent sealed.*

BRASIER.
19th February 1867.

451. EDWARD BRASIER, of New Cross, in the County of Surrey, Engineer, for an invention for—"Improvements in machinery for the manufacture of oakum from old ropes, cordage or other fibrous materials." *Letters Patent sealed.*

SCOTT.
19th February 1867.

452. HENRY YOUNG DARRACOTT SCOTT, of Ealing, in the County of Middlesex, Lieutenant Colonel in the Royal Engineers, for an invention for—"Improvements in constructing the floors and roofs of houses and other buildings."
Letters Patent sealed.

NEWTON.
19th February 1867.

453. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved railroad switch indicator."—*A communication to him from abroad by Thomas Shepard Hall, of Stamford, in the State of Connecticut, United States of America.* *Letters Patent sealed.*

HARRISON.
20th February 1867.

454. WILLIAM HARRISON, of Wharton Green, Winsford, in the County of Cheshire, United Kingdom of Great Britain and Ireland, Salt Manufacturer, for an invention for—"An improved method of consuming smoke in furnaces."
Complete specification; Letters Patent sealed.

CAVANAGH.
20th February 1867.

455. MICHAEL CAVANAGH, of Kensington, in the County of Middlesex, for an invention for—"Improvements in adjustable lock spindles." *Letters Patent sealed.*

ARCHER.
20th February 1867.

456. THOMAS ARCHER, the younger, of Dunston Engine Works, Gateshead-on-Tyne, in the County of Durham, Engineer, for an invention for—"Improvements in machinery or apparatus for breaking and grinding stone, ores and other hard materials." *Letters Patent sealed and specification filed by order.*

WALKER.
20th February 1867.

457. JOHN SCARISBRICK WALKER, of Wigan, in the County of Lancaster, Engineer, for an invention for—"An improved arrangement of mechanism or apparatus to be employed for undermining, 'holeing' and cutting coal."
Provisional protection only.

JOHNSON.
20th February 1867.

458. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the application of certain hydro-carbons to the obtainment of light and heat, and in the apparatus or means employed therein."—*A communication to him from abroad by Adrien Muller, Engineer, and Ignace Matheï, Banker, both of Paris, in the Empire of France.*
Letters Patent sealed.

MORELAND.
20th February 1867.

459. RICHARD MORELAND, junior, of Old Street, St. Luke's, for an invention for—"Improvements in the construction of floors for buildings."
Provisional protection only.

ALBINI.
BRAENDLIN.
20th February 1867.

460. AUGUSTO ALBINI, of Genoa, and also of No. 1, New Broad Street Buildings, in the City of London, Captain in the Italian Navy, and FRANCIS AUGUSTUS BRAENDLIN, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in breech-loading fire-arms."
Provisional protection only.

WEIGAND.
20th February 1867.

461. CHARLES WEIGAND, of Cambridge Street, Pimlico, in the County of Middlesex, Merchant, for an invention for—"Improvements in the construction and manufacture of umbrellas and parasols." *Provisional protection only.*

KUNSTMANN.
20th February 1867.

462. ROBERT KUNSTMANN, of Nuremburg, in the Kingdom of Bavaria, now of No. 384, City Road, in the County of Middlesex, Engineer, for an invention for—"An improved machine for cleaning and polishing the surface of glass, marble, metal and other smooth surfaces." *Provisional protection only.*

HASELTINE.
20th February 1867.

463. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of and apparatus for letting on and shutting off gas, and igniting the same."—*A communication to him from abroad by Edwin Eaton Bean and William Howard Mumter, both of Boston, Massachusetts, United States of America.* *Complete specification; Letters Patent sealed.*

HASELTINE.
20th February 1867.

464. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved boat detaching apparatus."—*A communication to him from abroad by Gideon Blackburn Massey, of the City, County and State of New York, United States of America.* *Complete specification; Letters Patent sealed.*

LAKE.
20th February 1867.

465. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in files and in handles for holding the same."—*A communication to him from abroad by Alfred Weed, of Boston, Massachusetts, United States of America.* *Complete specification; Letters Patent sealed.*

HENRY.
20th February 1867.

466. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in balloons and in arrangements relating thereto."—*A communication to him from abroad by Henry Giffard, of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

GAMBLE.
21st February 1867.

467. WILLIAM SUTTON GAMBLE, of Idmiston Road, Forrest Lane, Stratford, in the County of Essex, Marine Engineer, for an invention for—"Improvements in lubricating apparatus." *Letters Patent sealed.*

BISHOP.
21st February 1867.

468. JOHN BISHOP, of North Audley Street, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms and ordnance." *Provisional protection only.*

ADAMS.
21st February 1867.

469. WILLIAM BRIDGES ADAMS, of Woodstock Lodge, Blackheath, in the County of Kent, Engineer, for an invention for—"Improvements in uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests."
Provisional protection only.

HASELTINE. 21st February 1867.

470. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in wheels for carriages and other vehicles."—*A communication to him from abroad by John Raddin, of Lynn, Massachusetts, United States of America.* *Letters Patent sealed.*

WADKIN. SHEPHERD. 21st February 1867.

471. HENRY WADKIN, and CHARLES SHEPHERD, both of Chester, in the County of Chester, for an invention for—"Improvements in burning or calcining limestone and cement, and in ovens or apparatus employed for that purpose." *Letters Patent sealed.*

BREWER. 21st February 1867.

472. EDWARD GRIFFITH BREWER, of 89, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in machinery for obtaining and applying motive-power."—*A communication to him from abroad by Gustav Odemar, of Neustadt, near Stolpen, Kingdom of Saxony.* *Provisional protection only.*

KAUFMANN. 21st February 1867.

473. JOSEPH MEYERS KAUFMANN, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved means or apparatus to be used for travelling through the atmosphere and on land and water." *Letters Patent sealed.*

WEEMS. ROBERTSON. 21st February 1867.

474. JOHN WEEMS, of Johnstone, and THOMAS ROBERTSON, of Kennishead, both in the County of Renfrew, North Britain, for an invention for—"Improvements in motive-power engines." *Letters Patent sealed.*

SAINTY. 21st February 1867.

475. JOHN SAINTY, of Burnham Westgate, in the County of Norfolk, Agricultural Engineer, for an invention for—"Improvements in hurdles, lifts and fencing for agricultural and other purposes." *Provisional protection only.*

MITFORD. 21st February 1867.

476. BERTRAM MITFORD, of Northumberland Lodge, Cheltenham, in the County of Gloucester, for an invention for—"Improvements in apparatus for teaching alphabets and reading." *Provisional protection only.*

RIDDELL. 21st February 1867.

477. WILLIAM RIDDELL, of Crosby Hall Chambers, in the City of London, Merchant, for an invention for—"Improvements in machinery or apparatus for disentegrating wood and other similar fibrous substances." *Letters Patent sealed.*

ROBINSON. SMITH. 21st February 1867.

478. JOHN ROBINSON, of Rochdale, in the County of Lancaster, Engineer, and JOHN SMITH, of the same place, Engineer, for an invention for—"Improvements in applying motive-power to saw frames." *Letters Patent sealed; no specification filed.*

HALE. 21st February 1867.

479. WILLIAM HALE, of No. 9, Edith Terrace, Edith Grove, Fulham Road, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in propelling vessels, which improvements are also applicable to raising or forcing fluids." *Letters Patent sealed.*

BLAND. 21st February 1867.

480. JAMES FOX BLAND, of Sandgate, in the County of Kent, Captain in Her Majesty's 76th Regiment, for an invention for—"Improvements in breech-loading fire-arms, partly applicable to other arms." *Provisional protection only.*

MAHON. 21st February 1867.

481. LOUISA HARTLAND MAHON, of Bayswater, in the County of Middlesex, Spinster, for an invention for—"A new or improved method of working or producing designs in wool." *Provisional protection only.*

CROMPTON. 22nd February 1867.

482. JAMES ROGER CROMPTON, of Elton Paper Mills, Bury, in the County of Lancaster, for an invention for—"Improvements in rag engines." *Letters Patent sealed.*

WALKER. MONEY. LITTLE. 22nd February 1867.

483. MOWBRAY WALKER, of Essex Street, Strand, Engineer, GEORGE HENRY MONEY, of Jermyn Street, St. James's, Lieutenant-Colonel, and FRANCIS LITTLE, of the Junior Carlton Club, Regent Street, Captain, all in the County of Middlesex, for an invention for—"Improvements in the construction of breech-loading fire-arms and in the cartridges to be used therewith." *Letters Patent sealed.*

HARRISON. 22nd February 1867.

484. JOHN HARRISON, of Liverpool, in the County of Lancaster, Ship Owner, for an invention for—"Improvements in apparatus for removing sea-weed, shell-fish and other foreign matters, from the bottoms or submerged parts of ships and other floating structures." *Letters Patent sealed.*

WEST. DARLINGTON. 22nd February 1867.

485. WILLIAM WEST, of Tredenham House, St. Blazey, in the County of Cornwall, Civil Engineer, and JOHN DARLINGTON, of Moorgate Street Chambers, Moorgate Street, in the City of London, Mining Engineer, for an invention for—"Improvements in apparatus for counterbalancing pump rods, changing the lines or angles of reciprocatory motions, and transferring power and motion from one point to another." *Letters Patent sealed.*

COLWELL. 22nd February 1867.

486. CHARLES COLWELL, of Gorleston-cum-Southtown, in the County of Suffolk, Gentleman, for an invention for—"Improvements in apparatus for obtaining motive-power." *Letters Patent sealed.*

URQUHART. LINDSAY. 22nd February 1867.

487. WILLIAM WALTON URQUHART, and JOSEPH LINDSAY, of Dundee, in the County of Forfar, North Britain, Engineers, for an invention for—"Improvements in power loom lathes and in take-up, feed or progressive motions for power looms and other machines." *Letters Patent sealed.*

GORDON. 22nd February 1867.

488. ALICE ISABEL LUCAN GORDON, of Prince's Gate, Hyde Park, in the County of Middlesex, Spinster, for an invention for—"Improved apparatus for fastening or connecting the wires employed for transmitting electric signals on railway trains." *Letters Patent sealed.*

BROOMAN. 22nd February 1867.

489. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in machinery for the manufacture of speckled or spotted threads."—*A communication to him from abroad by Veran Sabran and Gaston Jessé, both of Paris, France.* *Provisional protection only.*

WAREING. 22nd February 1867.

490. JOSEPH WAREING, of Number 58, Lancaster Street, Birmingham, in the Borough of Birmingham, in the County of Warwick, for an invention for—"Improvements in cricket spikes to be made in steel, iron, brass or any other metal or material." *Provisional protection only.*

TATE. 22nd February 1867.

491. CHARLES MAITLAND TATE, of No. 13, Claremont Square, in the Parish of Clerkenwell, and County of Middlesex, Civil Engineer, for an invention for—"An improved preparation of materials and the application thereof to letters, envelopes, parcels, packages, deeds and other valuable papers or commodities, for their better security, by exposing any attempt at tampering therewith." *Provisional protection only.*

CLARK. 22nd February 1867.

492. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture and ornamentation of anhydrous rectified and double-faced toilet soaps."—*A communication to him from abroad by Pierre Bonaventure Mougeot, Doctor of Medicine, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

HENRY. 22nd February 1867.

493. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in railway engines and carriages, and in railways applicable for the purpose of locomotion on inclines, and also for retarding and stopping such engines and carriages."—*A communication to him from abroad by Pierre Ambjorn, Comte de Sparre, of 88, Rue Lafayette, Paris, in the French Empire.* *Provisional protection only.*

KESSLER. 22nd February 1867.

494. CHARLES KESSLER, of Frankfort o/ Maine, Germany, Chemist, for an invention for —"Improvements in the manufacture of carbonate of soda and of potash." *Provisional protection only.*

HEATH. 22nd February 1867.

495. WILLIAM EDWIN HEATH, of No. 7, Pembroke Terrace, Chalk Farm, in the County of Middlesex, for an invention for—"Improvements in gas pressure governors." *Letters Patent sealed.*

KING. 23rd February 1867.

496. THOMAS KING, of Brick Lane, Spitalfields, London, in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery for washing and cleansing casks." *Letters Patent sealed.*

PHILLIPS-SMITH. 23rd February 1867.

497. JOHN PHILLIPS-SMITH, of Hereford, in the County of Hereford, Engineer, for an invention for —"Improvements in tilling and cultivating land by steam power, and in machinery or apparatus for such purposes." *Letters Patent sealed.*

PURNELL. 23rd February 1867.

498. HENRY PURNELL, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in motive-power engines to be worked by water, steam or other fluid, and applicable to pumps." *Letters Patent sealed.*

KINDER. KINSEY. 23rd February 1867.

499. ARTHUR KINDER, and WILLIAM BARNS KINSEY, both of 92, Cannon Street, in the City of London, Engineers, for an invention for—"Improvements in gas engines." *Letters Patent sealed.*

DEAKIN. JOHNSON. 23rd February 1867.

500. WILLIAM DEAKIN, of Great Barr, in the County of Stafford, Ironmaster, and JOHN BAGNALL JOHNSON, of Tettenhall, also in the County of Stafford, Roll Turner, for an invention for—"Improvements in the manufacture of steel caps for spinning and other purposes." *Letters Patent sealed.*

GUMPEL. 23rd February 1867.

501. CHARLES GODFREY GUMPEL, of 49, Leicester Square, in the County of Middlesex, Anatomical Mechanist, for an invention for—"Improvements in chairs for affording proper support and rest to the human body (particularly the lower part of the spine) when in a sitting posture." *Provisional protection only.*

GRAY. 23rd February 1867.

502. WYNNE PEYTON GRAY, of Fulham, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

COLE. HORTON. 23rd February 1867.

503. HENRY JAMES COLE, of Kennington Cross, in the County of Surrey, Builder, and WILLIAM CHISHOLM HORTON, of Kennington Road, Gentleman, for an invention for—"Improved apparatus and mechanism to be used for awnings or coverings for omnibuses and other vehicles." *Provisional protection only.*

MILBANK. 23rd February 1867.

504. ISAAC MORRIS MILBANK, of Greenfield Hill, in the State of Connecticut, United States of America, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

MUNTZ. 23rd February 1867.

505. PHILIP ALBERT MUNTZ, of Keresley, near Coventry, in the County of Warwick, Gentleman, for an invention for—"Improvements in the manufacture of certain metallic alloys." *Provisional protection only.*

BILLINGHAM. GRIFFITHS. DUDLEY. 23rd February 1867.

506. BENJAMIN BILLINGHAM, of Bradley, in the County of Stafford, Blacksmith, and ABRAHAM GRIFFITHS, of Bilston, in the County of Stafford, Sheet Iron Shearer, and JOHN DUDLEY, of Daisy Bank, near Bilston aforesaid, Stock Taker, for an invention for—"Improvements in rails for railways and in chairs for supporting the said rails." *Provisional protection only.*

BATES. 23rd February 1867.

507. JOHN BATES, of 101, Eldon Street, in the Parish of Sheffield and County of York, Mechanical Engineer, for an invention for—"An improved lubricator or tallow cup." *Letters Patent sealed.*

TURNER. 23rd February 1867.

508. CHARLES TURNER, of the Town and County of Southampton, Civil Engineer, for an invention for—"Improvements in brushes for brushing hair by rotary motion and in apparatus connected therewith." *Provisional protection only.*

BROOMAN. 23rd February 1867.

509. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the preparation of threads and the manufacture of fabrics from the threads so prepared."—*A communication to him from abroad by Stanislas Vigoureux, of St. Denis, France.* *Letters Patent sealed.*

LÜTTRINGHAUS. 25th February 1867.

510. GUSTAV LÜTTRINGHAUS, of the Firm of Gustav Lüttringhaus and Company, of Mülhiem, in the Kingdom of Prussia, Manufacturer, for an invention for—"Improvements in portemonnaies, portfolios, pocket books, cigar cases and other similar articles." *Letters Patent sealed.*

MARSHALL. 25th February 1867.

511. JOHN MARSHALL, of Trafalgar Road, East Greenwich, in the County of Kent, Civil and Mechanical Engineer, for an invention for—"Certain improvements in fluid safety guages for steam-boilers and other pressure and vacuum vessels." *Letters Patent sealed.*

CHAPRON. 25th February 1867.

512. EUGÈNE CHAPRON, of Luxembourg, in the Duchy of Luxembourg, Manufacturer, for an invention for—"Improvements in the treatment of peat." *Provisional protection only.*

CASH. CASH. 25th February 1867.

513. JOHN CASH, and JOSEPH CASH, junior, both of the City of Coventry, Manufacturers, for an invention for—"An improvement in the manufacture of towels." *Letters Patent sealed.*

WEGUELIN. HIRST. 25th February 1867.

514. JOHN CHRISTOPHER REES WEGUELIN, of Croydon, in the County of Surrey, Esquire, and BENJAMIN HIRST, of Leeds, in the County of York, Merchant, for an invention for—"Improvements in generating steam and vaporizing liquids, and in apparatus employed therein." *Letters Patent sealed; no specification filed.*

BARRATT. 25th February 1867.

515. WILLIAM BARRATT, of Earl Street, Bristol, in the County of Gloucester, Tallow Merchant, for an invention for—"Improvements in apparatus for boiling fats, oils and bones, whereby to neutralize and avoid the escape of noxious gases." *Letters Patent sealed.*

ALISON. 25th February 1867.

516. JOHN ALISON, of Brightlands, Reigate, in the County of Surrey, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

HOPKINSON. HOPKINSON. 26th February 1867.

517. JOHN ADDY HOPKINSON, and JOSEPH HOPKINSON the younger, both of Huddersfield, in the County of York, Engineers, for an invention for—"Improvements in furnaces for steam-boilers, boiling pans and other similar purposes." *Provisional protection only.*

DAWS. 26th February 1867.

518. GEORGE DAWS, of Penge, in the County of Surrey, for an invention for—"Improvements in signalling on railways and in apparatus connected therewith." *Letters Patent sealed.*

SYME. 26th February 1867.

519. JAMES SYME, of Glasgow, in the County of Lanark, Agent, for an invention for—"Improvements in central-fire cartridges." *Provisional protection only.*

SAMSON. 26th February 1867.

520. WILLIAM HENRY SAMSON, of Underhill, in the Parish of Wittersham, in the County of Kent, Farmer and Grazier, for an invention for—"Improvements in the means and apparatus for drying hops." *Letters Patent sealed.*

DU PRÉ. 26th February 1867.

521. HENRY RAMUS DU PRÉ, of Shellingford, in the County of Berks, for an invention for—"A new or improved candlestick." *Provisional protection only.*

HILL. 26th February 1867.

522. WILLIAM ROBERT HILL, of 66, Vauxhall Walk, Lambeth, S., for an invention for—"The 'Chromo-eidotrope' for dissolving views and optical effects." *Provisional protection* NOT *granted.*

FUNNELL. 26th February 1867.

523. EDWARD FUNNELL, of 54, East Street, Brighton, in the County of Sussex, Clockmaker, for an invention for—"An alarum for the use of railways." *Letters Patent sealed.*

HELY. 26th February 1867.

524. EDWARD HELY, of Seventeen, Lower Ormond Quay, in the City of Dublin, Envelope Manufacturer, for an invention for—"Improvements in the manufacture of envelopes." *Letters Patent sealed.*

YOUNG. 26th February 1867.

525. GEORGE YOUNG, of Grangemouth, in the County of Stirling, North Britain, for an invention for—"Certain improvements in lamps." *Letters Patent sealed.*

SHARMAN. 26th February 1867.

526. JOSEPH LEWIS SHARMAN, of No. 67, Denmark Road, Northampton, for an invention for—"Improvements in lasts for making boots and shoes." *Provisional protection only.*

MARTIN. 26th February 1867.

527. CLEMENT MARTIN, of Hammersmith, in the County of Middlesex, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

TAYLOR. 26th February 1867.

528. JOHN GEORGE TAYLOR, of 29, Boulevart St. Martin, Paris, in the Empire of France, Manufacturer, for an invention for—"Improvements in the manufacture of chains and fastenings." *Provisional protection only.*

TATHAM. 26th February 1867.

529. JOHN TATHAM, of Rochdale, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in machinery for preparing cotton, wool and other fibrous materials for spinning." *Letters Patent sealed.*

NEWTON. 26th February 1867.

530. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in fastenings for driving and other belts or bands."—*A communication to him from abroad by John Ashton Greene, of Brooklyn, in the State of New York, United States of America.* *Letters Patent sealed.*

BROOMAN. 26th February 1867.

531. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in apparatus for expressing or extracting liquids from substances containing the same, and in the manufacture of a fabric employed therein."—*A communication to him from abroad by Theodore Poizot and Alphonse Druelle, both of Serancourt, France.* *Provisional protection only.*

BROOMAN. 26th February 1867.

532. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"A new method of and apparatus for winding up clockwork."—*A communication to him from abroad by Gustave Rey, junior, of Paris, France.*

Provisional protection only.

HASELTINE. 27th February 1867.

533. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved covering or cushion for horses' feet."—*A communication to him from abroad by Samuel Adlam, junior, of Charlestown, Massachusetts, United States of America.* *Letters Patent sealed.*

WRIGHT. 27th February 1867.

534. FRANCIS VERE WRIGHT, of St. James' Place, in the City of Westminster and County of Middlesex, Gentleman, for an invention for—"Improved adjustable reflectors for lamps and lighting purposes."

Complete specification; Letters Patent sealed.

HOWAT. 27th February 1867.

535. ANDREW HOWAT, of Farnworth, near Bolton, in the County of Lancaster, Brass Founder, for an invention for—"Improvements in machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals." *Letters Patent sealed.*

STOBBS. 27th February 1867.

536. WILLIAM STOBBS, of Leeds, in the County of York, Coach Proprietor, for an invention for—"An improved steam driving wheel for imparting rotary motion to shafts." *Provisional protection only.*

COOPER. 27th February 1867.

537. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms."

Letters Patent sealed.

SAXBY. FARMER. 27th February 1867.

538. JOHN SAXBY, and JOHN STINSON FARMER, of the Patent Railway Signal Works, Kilburn, Railway Signal Engineers, for an invention for—"Improvements in apparatus for working and governing, controlling or regulating railway signals, points and switches." *Letters Patent sealed.*

BONNEVILLE. 27th February 1867.

539. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"An improved apparatus to deepen, excavate, scour and remove the mud, slime, stones and other foul matters from the bed of rivers, streams and other watercourses."—*A communication from Joseph Grosley and Louis Albert Merckens, two persons resident at Kremlin, in the Department of the Seine, Empire of France, aforesaid.*

Letters Patent sealed.

HUMPHREYS. 27th February 1867.

540. THOMAS HUMPHREYS, of Deptford, in the County of Kent, Firewood Merchant, for an invention for—"A new or improved fagot or fire-lighter."

Letters Patent sealed.

DYSON. 27th February 1867.

541. WILLIAM DYSON, of Thongsbridge, near Huddersfield, in the County of York, Overlooker, for an invention for—"Improvements in machinery for twisting and doubling fibres and threads." *Provisional protection only.*

KAY. HAMILTON. 27th February 1867.

542. THOMAS BISPHAM KAY, of Bolton-le-Moors, in the County of Lancaster, Gentleman, and FRANCIS HAMILTON, of the same place, Foreman, for an invention for—"Certain improvements in carding-engines to be employed for carding cotton and other fibrous materials." *Complete specification; Letters Patent sealed.*

MCLINTOCK. 27th February 1867.

543. JOHN MCLINTOCK, of Barnsley, in the County of York, for an invention for—"An improved packing for piston rods, pump rods and valve spindles."

Letters Patent sealed.

BUTLER. 27th February 1867.

544. SAMUEL BUTLER, of Nottingham, Lace Manufacturer, for an invention for—"Improvements in the manufacture of figured lace in twist lace machines."

Letters Patent sealed.

PHILBOIS. MARCHAL. 27th February 1867.

545. LOUIS HENRY PHILBOIS, residing at No. 116, Rue de Rivoli, Paris, in the Empire of France, and AUGUSTIN MARCHAL, residing at No. 34, Boulevard de Sébastopol, Paris, in the Empire of France, Gentlemen, for an invention for—"Improvements in springs for crinolines for ladies' petticoats and other garments."—*A communication to them from Victor Alfred Krafft, a person resident at No. 12, Rue Gît le Cœur, Paris, in the Empire of France.* *Provisional protection only.*

HOLLEY.
27th February 1867.

546. ALEXANDER LYMAN HOLLEY, of the State, County and City of New York, in the United States of America, Mechanical Engineer, for an invention for—"Improvements in the manufacture of iron and steel."
Provisional protection NOT *granted.*

LIVESEY.
EDWARDS.
JEFFREYS.
27th February 1867.

547. JAMES LIVESEY, and JOHN EDWARDS, of 9, Victoria Chambers, Westminster, and WILLIAM JEFFREYS, of 43, Cooper's Road, Old Kent Road, Surrey, for an invention for—"Improvements in signal and switch apparatus for railways."
Letters Patent sealed.

MACKAY.
27th February 1867.

548. MURDOCH MACKAY, of Surrey Street, Portsea, in the County of Hants, Bleacher, for an invention for—"Improvements in boiling and bleaching all kinds of textile fabrics and vegetable fibres and matters." *Letters Patent sealed.*

NEWTON.
27th February 1867.

549. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in railways and in the means of propulsion used thereon."—*A communication to him from abroad by Joseph Auguste Andre Fontaine, of New York City, in the United States of America.* *Provisional protection only.*

NEWTON.
27th February 1867.

550. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in screws and bolts."—*A communication to him from abroad by William Gorham Angell, of Providence, in the State of Rhode Island, United States of America.*
Letters Patent sealed.

McDOUGALL.
27th February 1867.

551. ALEXANDER McDOUGALL, of Manchester, in the County of Lancaster, Chemist, for an invention for—"Improvements in utilizing a certain description of clay and a substance usually found therewith." *Letters Patent sealed.*

POWNALL.
28th February 1867.

552. CHARLES JAMES POWNALL, of the Union Club, London, Gentleman, for an invention for—"Improvements in the means of ventilating pits and mines."
Provisional protection only.

HYATT.
28th February 1867.

553. THOMAS HYATT, of Wolverhampton, in the County of Stafford, Brass Founder, for an invention for—"An improved mode or manner of securing door and other knobs to their spindles." *Provisional protection only.*

GUY.
28th February 1867.

554. ROBERT EDWARDS GUY, of Liverpool, in the County of Lancaster, Clerk, for an invention for—"Improvements in apparatus for the reception of moneys paid as fares in omnibuses and other vehicles." *Provisional protection only.*

SHORE.
28th February 1867.

555. SAMUEL SHORE, of Rochdale, in the County of Lancaster, for an invention for—"Improvements in preparing wool and other fibrous materials to be spun."
Letters Patent sealed.

CHALUS.
28th February 1867.

556. ADOLPHE GILBERT CHALUS, of 2, Rue Sainte-Appoline, Paris (Empire of France), Merchant, for an invention for—"Improvements in apparatus for producing artificial light from gas, air and liquids." *Letters Patent sealed.*

PIDDINGTON.
28th February 1867.

557. JOHN PIDDINGTON, of 53, Gracechurch Street, in the City of London, for an invention for—"Improvements in inkstands."—*A communication to him from abroad by George Marie Stoltz, junior, residing at 52, Rue Fontaine, Saint Georges, Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*

McCALLUM.
28th February 1867.

558. ANDREW McCALLUM, of Greenock, in the County of Renfrew, North Britain, for an invention for—"An improved mode or means for actuating motive-power engines, and improvements in the apparatus employed therefor."
Letters Patent sealed.

BROWN.
28th February 1867.

559. ANDREW BETTS BROWN, of the Vauxhall Iron Works, Wandsworth Road, in the County of Surrey, for an invention for—"Improvements in steering apparatus and in machinery for stopping, starting and reversing heavy steam-engines."
Letters Patent sealed.

ALLEN.
WINSOR.
28th February 1867.

560. STILLMAN BOYD ALLEN, and JAIRUS HANDY WINSOR, of the State of Massachusetts, of the United States of America, for an invention for—"Improvements in generating heat by the admixture and combustion of a hydro-carbon vapor, air and the gaseous components of steam."—*A communication to them by Henry Rutger Foote, a person resident at Boston, in the County of Suffolk and State aforesaid.*
Complete specification; Letters Patent sealed.

HUGHES.
28th February 1867.

561. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"An improved brake for sewing-machines."—*A communication to him from abroad by John Augustus Minor and Robert Bowman, of Middletown, in the County of Middlesex, State of Connecticut, United States of America.* *Letters Patent sealed.*

BUHRER.
28th February 1867.

562. JACOB BUHRER, of Munich, in the Kingdom of Bavaria, but now of Keppel Street, in the County of Middlesex, for an invention for—"Improvements in ovens and kilns for drying and burning bricks and other articles." *Letters Patent sealed; specification filed by order.*

CROLL.
28th February 1867.

563. ALEXANDER ANGUS CROLL, of Coleman Street, in the City of London, Civil Engineer, for an invention for—"Improvements in the treatment of liquid hydrocarbons for the purpose of obtaining a permanent gas." *Letters Patent sealed.*

WOOLRICH.
28th February 1867.

564. MURHALL WOOLRICH, of Well House, Handley, in the County of Chester, for an invention for—"Improvements in means and apparatus employed for the cure of the disease called 'Foot-rot' in sheep." *Provisional protection only.*

HARBERT.
GOODMAN.
28th February 1867.

565. JAMES HARBERT, and FREDERICK GOODMAN, both of Kidderminster, in the County of Worcester, for an invention for—"Improvements in destroying explosive gases in coal and other mines, in order to render them safe for the miners to enter." *Letters Patent sealed.*

BELLERBY.
28th February 1867.

566. JOHN BELLERBY the younger, of the City of York, Timber Merchant, for an invention for—"Improvements in machinery for grinding, crushing, hulling or shelling various kinds of farm or vegetable produce, applicable also to the crushing or grinding of minerals and other hard substances." *Letters Patent sealed.*

RUSSELL.
28th February 1867.

567. GEORGE FITZJAMES RUSSELL, of Piccadilly, in the County of Middlesex, Esquire, for an invention for—"Improvements in the manufacture and construction of wheels." *Provisional protection only.*

CLARK.
28th February 1867.

568. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the means and apparatus for producing oxygen, and in the application of the same for metallurgical and other purposes."—*A communication to him from abroad by Henri Adolphe Archereau, Chemist, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

NEWTON.
28th February 1867.

569. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus to be used as spinal, abdominal and pelvic truss supports."—*A communication to him from abroad by Edmund Prior Banning, of New York City, in the United States of America.* *Letters Patent sealed.*

NEWTON.
28th February 1867.

570. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"A novel method of cutting veneers."—*A communication to him from abroad by John Burns Wilson, of New York City, in the United States of America.* *Letters Patent sealed.*

NEWTON.
28th February 1867.

571. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in steam and gas engines."—*A communication to him from abroad by Charles E. Emery, of Brooklyn, in the State of New York, United States of America.* *Letters Patent sealed and specification filed by order.*

JONES.
HEDGES.
1st March 1867.

572. RALPH AUGUSTINE JONES, and JOHN COOPER HEDGES, both of Aylesbury, in the County of Buckingham, for an invention for—"Improvements in portable fire-escapes." *Letters Patent sealed and specification filed by order.*

BROADBENT.
1st March 1867.

573. JUBAL CHARLTON BROADBENT, of Rochdale, in the County of Lancaster, Engineer, for an invention for—"A compound safety disengaging hook." *Letters Patent sealed.*

JOHNSON.
1st March 1867.

574. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery or apparatus for sewing and ornamenting textile fabrics and other like goods, and in the appliances connected therewith."—*A communication to him from abroad by George Joseph Richardson, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

BERRENS. 1st March 1867.

575. THEOPHILUS BERRENS, of the Town of Tarbes, now of No. 60, Boulevart de Strasbourg, Paris, in the Empire of France, Railway Engineer, for an invention for—"Improvements in the process and apparatus for perforating tunnels and galleries of mines of great length, through rocks, much quicker than by the process hitherto employed." *Letters Patent sealed.*

BECKINGHAM. 1st March 1867.

576. CHARLES HENRY BECKINGHAM, of 415, Strand, in the County of Middlesex, Tobacconist, for an invention for—"Improvements in billiard tables." *Provisional protection* NOT *granted.*

THURGAR. 1st March 1867.

577. WALTER CHRISTOPHER THURGAR, of the City of Norwich, Surgeon, for an invention for—"Improved means or apparatus for regulating the supply of gas to burners." *Provisional protection only.*

SHEARD. 1st March 1867.

578. BENJAMIN SHEARD, of Elmwood House, Batley, in the County of York, Manufacturer and Merchant, for an invention for—"Improvements in steam-boilers' and other furnaces." *Letters Patent sealed.*

PARRY. FREARSON. 1st March 1867.

579. WILLIAM PARRY, of Birmingham, in the County of Warwick, Mineral Surveyor, and JOHN FREARSON, of Birmingham, aforesaid, Mechanical Engineer, for an invention for—"Improvements in treating or purifying sewage and in apparatus to be used for that purpose." *Provisional protection only.*

VANDEPUTTE. 1st March 1867.

580. FREDERIC ANGELUS PETER VANDEPUTTE, of Ghent, in the Kingdom of Belgium, Engineer-Manufacturer, for an invention for—"An universal isochronous pendulum speed regulator for motive engines." *Letters Patent sealed.*

JONES. 1st March 1867.

581. FREDERICK WARNER JONES, of Exeter, in the County of Devon, for an invention for—"Improvements in machinery or apparatus for indicating the speed of locomotives and railway trains." *Provisional protection only.*

STIDDER. MORRIS. 1st March 1867.

582. JAMES GEORGE STIDDER, and ROBERT MORRIS, both of Palace Road, in the County of Surrey, Engineers, for an invention for—"Improvements in axles, shafts and axle boxes." *Letters Patent sealed.*

GOSSI. 2nd March 1867.

583. MAX GOSSI, Merchant, of Antwerp, Office 11, Rue des Peignes, for an invention for—"Improvements in transporting, warehousing and barrelling petroleum, oil or liquids lighter than water." *Letters Patent sealed.*

WILSON. BAILEY. 2nd March 1867.

584. ROBERT WILSON, of the City of Manchester, Ironmonger, and WILLIAM HENRY BAILEY, of the Albion Works, Salford, in the County of Lancaster, Brass Founder, Turret Clock and Steam Guage Manufacturer, for an invention for—"Improvements in call bells, letter balances and weighing machines, which are applicable to one or more of the afore-mentioned articles, separately or combined." *Provisional protection only.*

FRANK. GOODDY. 2nd March 1867.

585. SAMUEL FRANK, and RICHARD GOODDY, of Manchester, in the County of Lancaster, Manufacturers, for an invention for—"Certain improvements in the method of producing selvedge lines or borders on woven fabrics and in apparatus connected therewith." *Provisional protection only.*

WILD. 2nd March 1867.

586. JOHN WILD the younger, of Oldham, in the County of Lancaster, for an invention for—"Improvements in condensing steam-engines." *Provisional protection only.*

HUGHES. 2nd March 1867.

587. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in filtering presses for expressing the liquid parts and retaining the solid parts of any semi-liquid substances."—*A communication to him from abroad by Pierre du Rieux and Edouard Roettger, of Lille, in the Empire of France, Civil Engineers.* *Letters Patent sealed.*

GARRARD. 2nd March 1867.

588. GEORGE MINGAY GARRARD, of 52, Gracechurch Street, in the City of London, Civil Engineer, for an invention for—"Improvements in apparatus employed in mowing and reaping." *Letters Patent sealed.*

ILLINGWORTH. ILLINGWORTH. 2nd March 1867.

589. ALFRED ILLINGWORTH, and HENRY ILLINGWORTH, of Bradford, in the County of York, Worsted Spinners, for an invention for—"Improvements in cops or bobbins and parts connected therewith, used in preparing and spinning fibrous substances." *Provisional protection only.*

THRING. 2nd March 1867.

590. EDWARD THRING, of Uppingham, in the County of Rutland, Clerk, for an invention for—"Improvements in stoves or fire-places." *Letters Patent sealed.*

COFFEY. 2nd March 1867.

591. JOHN AMBROSE COFFEY, Consulting Engineer, of No. 32, Great Saint Helen's, in the City of London, for an invention for—"Improvements in self-acting steam and fluid safety gauges, the said improvements being applicable to cocks or taps and valves." *Letters Patent sealed.*

LAURYS. 2nd March 1867.

592. ANNE CATHERINE LAURYS, of the City of Louvain, in the Kingdom of Belgium, Merchant, for an invention for—"A new and useful fabric for elastic stockings, stays or corsets, bandages and other similar and analogous articles." *Letters Patent sealed.*

HASELTINE. 2nd March 1867.

593. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved self-lubricating axle for carriages and other vehicles."—*A communication to him from abroad by Silas Safford Putnam, of Dorchester, Massachusetts, United States of America.* *Complete specification; Letters Patent sealed.*

PAPE. 2nd March 1867.

594. WILLIAM ROCHESTER PAPE, of Newcastle-on-Tyne, in the County of Northumberland, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

BINFIELD. 4th March 1867.

595. THOMAS JAMES BINFIELD, of 62, Hatcham Park Road, New Cross, Deptford, Kent, Packing Case Maker, for an invention for—"An improved method of fastening the iron bands for packages, cases or boxes containing goods." *Provisional protection only.*

GEDGE. 4th March 1867.

596. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved flax stripping or peeling machine."—*A communication to him from abroad by Pareydt de Bergues, of No. 39, Faubourg St. Martin, Paris, France.* *Letters Patent sealed.*

GEDGE. 4th March 1867.

597. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in privies or waterclosets."—*A communication to him from abroad by Auguste Paret, of 39, Faubourg St. Martin, Paris, in the Empire of France.* *Provisional protection only.*

KEEN. 4th March 1867.

598. RICHARD EDWARD KEEN, of No. 26, Old Change, in the City of London, Gentleman, for an invention for—"An improved combined reel-frame and thread-cutter." *Letters Patent sealed.*

MENNONS. 4th March 1867.

599. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"Improvements in breech-loading fire-arms."—*A communication from Benjamin Stone Roberts, Major General, United States Army, a person resident at No. 14, Rue Auber, Paris, France.* *Provisional protection only.*

DEANE. 4th March 1867.

600. EDWARD DEANE, of 1, Arthur Street East, London Bridge, in the City of London, for an invention for—"Improvements in tent poles for regulating the tension from the interior of the tent or marquee." *Provisional protection only.*

MARCHENT. PARKER. 4th March 1867.

601. JAMES MARCHENT, and JOHN PARKER, of the Prospect Foundry, Bowling, near Bradford, in the County of York, for an invention for—"Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes." *Letters Patent sealed.*

WADDINGTON. 4th March 1867.

602. RICHARD EDEN WADDINGTON, of Plymouth, in the County of Devon, Umbrella Manufacturer, for an invention for—"Improvements in umbrellas, parasols and sun shades." *Provisional protection only.*

LEWIS. ARCHBOLD. 4th March 1867.

603. JAMES WILLIAM LEWIS, of Birmingham, in the County of Warwick, Die Sinker, and GEORGE ARCHBOLD, of Handsworth, in the County of Stafford, Rouge Manufacturer, for an invention for—"Improvements in needle cases." *Letters Patent sealed.*

THOMPSON. 4th March 1867.

604. ROBERT THOMPSON, of New Charlton, in the County of Kent, Engineer, for an invention for—"Improvements in machinery for cutting, shaping and polishing mouldings and shapes of circular, oval or irregular curved forms in stone, wood or other materials, part of such improvements being applicable for veneering mouldings of similar forms." *Letters Patent sealed.*

NEWINGTON. 4th March 1867.

605. SAMUEL NEWINGTON, of Ticehurst, in the County of Sussex, Member of the Royal College of Physicians, London, for an invention for—"An improved compound for destroying insects and preventing and checking blight in plants." *Letters Patent sealed.*

STANLEY. 5th March 1867.

606. JOHN MARTIN STANLEY, Bradford Street, Birmingham, in the County of Warwick, Metallic Ware Manufacturer, for an invention for—"An improved or metallic front for shirts or other articles of under clothing." *Provisional protection only.*

MARTIN. 5th March 1867.

607. JOHN COWDERY MARTIN, of High Street, Barnes, in the County of Surrey, Gelatine Maker, for an invention for—"An improvement in packing and preserving animal size." *Letters Patent sealed.*

ULLIEL. 5th March 1867.

608. HENRI ULLIEL, of the Avenue de Neuilly, in the Department of Seine, France, Manufacturer of Gas Apparatus, for an invention for—"Improved apparatus for the production or improvement of inflammable gases." *Letters Patent sealed.*

BEELEY. 5th March 1867.

609. THOMAS BEELEY, of Newton Moor, in the County of Chester, Engineer, for an invention for—"Certain improvements in boilers or steam generators." *Letters Patent sealed.*

JONES. 5th March 1867.

610. FREDRICK HUGH JONES, of Manchester, in the County of Lancaster, Commission Agent, for an invention for—"Certain improvements in wearing-apparel." *Letters Patent sealed.*

MACRAE. 5th March 1867.

611. ALEXANDER SEPTIMUS MACRAE, of Liverpool, in the County of Lancaster, Oil Dealer, for an invention for—"Improvements in hydro-carbon oils used for safety and other lamps." *Provisional protection only.*

SMITH. 5th March 1867.

612. JOHN EDWARD SMITH, of 158, High Street, Southwark, trading under the style of J. E. Smith and Company, Wholesale Shirt and Collar Manufacturers, for an invention for—"An improvement in ornamenting collars, shirt fronts and wristbands." *Provisional protection only.*

HASELTINE. 5th March 1867.

613. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of packing for the joints of steam-engines, pumps and for other purposes."—*A communication to him from abroad by Morris Botticher, of Newark, New Jersey, United States of America.* *Complete specification; Letters Patent sealed.*

HASELTINE. 5th March 1867.

614. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved feed-water regulator for steam-boilers."—*A communication to him from abroad by John Wesley Doughty and Benjamin Franklin Olmsted, both of Newburgh, New York, United States of America.* *Complete specification; Letters Patent sealed.*

WITHY. COTTERELL. 5th March 1867.

615. GEORGE WITHY, and JOSEPH FRANCIS COTTERELL, both of Bath, in the County of Somerset, Soda Water Manufacturers, for an invention for—"Improvements in cases or receptacles for bottles and similar articles." *Letters Patent sealed.*

DUYCK. 5th March 1867.

616. JAMES EDWARD DUYCK, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in the utilization of mineral and other oils for the production of heat, and in the apparatus employed therefor." *Provisional protection only.*

ROWLEY. 5th March 1867.

617. GEORGE ROWLEY, of Birmingham, in the County of Warwick, Miners' Safety Lamp Manufacturer, for an invention for—"Certain improvements in miners' safety lamps." *Provisional protection only.*

WELLS. PRYOR. 5th March 1867.

618. EDWARD WELLS, of Shoreditch, in the County of Middlesex, Ironmonger, and WILLIAM PRYOR, of Hackney, in the County of Middlesex, Ironmonger's Assistant, for an invention for—"Improvements in rising or adjustable brackets for supporting shelves and rods in shop windows, and for other purposes." *Provisional protection only.*

HASELTINE. 5th March 1867.

619. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in repeating breech-loading fire-arms."—*A communication to him from abroad by Valentine Fogerty, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

BRECKON. DIXON. 6th March 1867.

620. JOHN ROBERT BRECKON, of Darlington, in the County of Durham, Accountant and Colliery Manager, and ROBERT DIXON, of Crook, in the same County, Mechanical Engineer, for an invention for—"Improvements in machiney for conveying, screening and loading coke and other materials." *Letters Patent sealed.*

TONGUE. 6th March 1867.

621. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in steam-engines and pumps."—*A communication to him from abroad by Hart Foster Pease, of the City of Brooklyn, in the County of Kings and State of New York, United States of America.* *Letters Patent sealed.*

MORGAN. 6th March 1867.

622. GEORGE HENRY MORGAN, of Edgware Road, in the County of Middlesex, for an invention for—"Improvements in carriages." *Letters Patent sealed.*

GEDGE. 6th March 1867.

623. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Certain improvements in the construction of pianofortes."—*A communication to him from abroad by Francis Pivoda, of Prague, in the Empire of Austria, Pianist and Composer.* *Complete specification; Letters Patent sealed.*

THOMPSON. 6th March 1867.

624. JOHN THOMPSON, of Nettlebed, in the County of Oxford, Stoneware Manufacturer, for an invention for—"Improvements in the manufacture of gas." *Provisional protection only.*

ASH. 6th March 1867.

625. HENRY CLARKE ASH, of 315c, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in the process and apparatus employed in cooling and freezing liquids." *Provisional protection only.*

STOREY. 6th March 1867.

626. EDWARD STOREY, of the Town and County of Lancaster, Manufacturer, for an invention for—"Improvements in or applicable to certain marine and stationary land boilers for generating steam." *Letters Patent sealed.*

BARTON. WHALLEY. 6th March 1867.

627. HENRY BARTON, and EDWARD WHALLEY, of Blackburn, in the County of Lancaster, for an invention for—"Certain improvements in apparatus for spinning and twisting cotton and other fibrous materials." *Letters Patent sealed.*

TOMLINSON. 6th March 1867.

628. WILLIAM TOMLINSON, of New Mills, in the County of Derby, for an invention for—"Improvements in machinery or apparatus used in connection with calico printing machines." *Letters Patent sealed.*

HALLETT. 6th March 1867.

629. HENRY WATSON HALLETT, of Springfield, Massachusetts, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"An improved mode of and means for producing optical illusions."—*A communication to him from abroad by Milton Bradley, of Springfield, Massachusetts, United States of America.* *Letters Patent sealed.*

NEWTON. 6th March 1867.

630. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in couplings for baling bands."—*A communication to him from abroad by George Newton Beard, of St. Louis, in the State of Missouri, United States of America.* *Letters Patent sealed.*

SIEMENS. 7th March 1867.

631. CHARLES WILLIAM SIEMENS, of No. 3, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in apparatus for measuring water, alcohol and other fluids."—*The result partly of a communication made to him from abroad by Dr. Werner Siemens, of Berlin, in the Kingdom of Prussia, and partly of an invention and discovery made by himself.* *Letters Patent sealed.*

DAVIES. 7th March 1867.

632. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in insulators for telegraph wires."—*A communication to him from abroad by David Brooks, of Philadelphia, Pennsylvania, United States of America.* *Provisional protection only.*

NORMANDY. 7th March 1867.

633. ALPHONSE LOUIS NORMANDY, of No. 17, New Park Road, Stockwell, in the County of Surrey, Engineer, for an invention for—"Improvements in engines worked by heated air and by other suitable heated gas or gases." *Letters Patent sealed.*

HEGINBOTTOM. 7th March 1867.

634. WILLIAM HEGINBOTTOM, of Mixenden, near Halifax, in the County of York, Cotton Spinner, for an invention for—"Improvements in steam-boiler furnaces." *Provisional protection only.*

HEAPS. MOORWOOD. 7th March 1867.

635. EDWARD KNOWLES HEAPS, of Woodhouse Lane, Leeds, in the County of York, Ironmonger, and THOMAS PARKIN MOORWOOD, of Harleston Iron Works, Sheffield, in the County of York, Ironfounder, for an invention for—"Improvements in fire-ranges for dwelling-houses." *Letters Patent sealed.*

DIMOCK. GRESHAM. 7th March 1867.

636. IRA DIMOCK, of 97, Cheapside, in the City of London, and JAMES GRESHAM, of the City of Manchester, Engineer, for an invention for—"Improvements in or applicable to sewing-machines." *Letters Patent sealed.*

GILES. 7th March 1867.

637. ALFRED GILES, of Manchester, in the County of Lancaster, Engineer, for an invention for—"An improved mixing apparatus, also applicable to beating eggs and to other similar purposes." *Letters Patent sealed.*

ACHGELIS. 7th March 1867.

638. HENRY WILLIAM ACHGELIS, of Manchester, in the County of Lancaster, for an invention for—"Improvements in bridle bits." *Letters Patent sealed.*

LUKE. PARKES. 7th March 1867.

639. ROBERT LUKE, and WILLIAM PARKES, of Birmingham, in the County of Warwick, Metallic Bedstead Manufacturers, for an invention for—"Certain improvements in the manufacture of metallic bedsteads, part of which said improvements are applicable to cornice poles, gas fittings, balustrades and other like articles." *Provisional protection only.*

WORTLEY. 7th March 1867.

640. COLONEL STUART WORTLEY, of Grove End Road, Saint John's Wood, in the County of Middlesex, for an invention for—"Improvements in apparatus for hatching eggs." *Letters Patent sealed.*

HODGE. 7th March 1867.

641. PAUL RAPSEY HODGE, of 106, Cannon Street, in the City of London, Civil Engineer, for an invention for—"Improvements in hydraulic motors." *Letters Patent sealed.*

NEWTON. 7th March 1867.

642. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the county of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of porcelain."—*A communication to him from abroad by Waldron Joseph Cheyney, of Philadelphia, in the State of Pennsylvania, United States of America.* *Letters Patent sealed.*

NEWTON. 7th March 1867.

643. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in safety valves for steam-boilers or generators."—*A communication to him from abroad by George William Richardson, of Troy, in the State of New York, United States of America.* *Provisional protection only.*

NEWTON. 7th March 1867.

644. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in steam hammers."—*A communication to him from abroad by William Sellers and Coleman Sellers, both of Philadelphia, in the State of Pennsylvania, United States of America.* *Letters Patent sealed.*

WOODWARD. 7th March 1867.

645. JOHN GARRISON WOODWARD, of St. John's, in the Province of New Brunswick, but now of Liverpool, in the County of Lancaster, Merchant, for an invention for—"An improved mode of generating steam." *Provisional protection only.*

CLARK. 7th March 1867.

646. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in actuating fan blowers by steam power."—*A communication to him from abroad by George Washington Lemley, of Paterson, in the County of Passaic and State of New Jersey, United States of America.* *Letters Patent sealed.*

LLOYD. 7th March 1867.

647. EDWARD LLOYD, of Bow, in the County of Middlesex, Paper Manufacturer and Newspaper Proprietor, for an invention for—"Improvements in the treatment or preparation of straw and other fibrous materials for the manufacture of paper."
Letters Patent sealed.

HURRELL. 7th March 1867.

648. WILLIAM HURRELL, of No. 66, Houndsditch, in the City of London, for an invention for—"Improvements in bushings for the bung holes of casks and similar vessels." *Letters Patent sealed.*

SNOW. 7th March 1867.

649. BENJAMIN SNOW, junior, of the State of Massachusetts, of the United States of America, for an invention for—"Improvements in scissors or shears."—*A communication to him by Perez Christopher Clapp, a person resident at Boston, in the County of Suffolk and State aforesaid.*
Complete specification; Letters Patent sealed.

YOUNG. BRASH. 7th March 1867.

650. WILLIAM YOUNG, Manager of the Oil Works, Straiton, in the County of Midlothian, and PETER BRASH, of Leith, in the same County, Soap, Candle and Oil Manufacturer, for an invention for—"Improvements in the distillation of bituminous substances." *Letters Patent sealed.*

TOWERS. 7th March 1867.

651. WILLIAM HENRY TOWERS, of the City, County and State of New York, United States of America, for an invention for—"A new and useful process whereby leather, wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent."
Complete specification; Letters Patent sealed.

SALISBURY. 7th March 1867.

652. SILAS COVEL L. SALISBURY, of the City and State of New York, United States of America, Civil Engineer, for an invention for—"Improvements in the manner of reducing and refining metallic ores, more particularly ores of iron, and in converting iron into steel, and in apparatus to be used in connection therewith."
Letters Patent sealed.

MATHER. 8th March 1867.

653. COLIN MATHER, of the Salford Iron Works, Manchester, for an invention for—"Improvements in machinery for mangling or beetling fabrics."
Letters Patent sealed.

POPE. 8th March 1867.

654. FREDERIC POPE, of No. 146, Cheapside, in the City of London, Gentleman, for an invention for—"Improvements in locks." *Letters Pa ent sealed.*

CHURCHMAN. BRABY. 8th March 1867.

655. HENRY CHURCHMAN, of Horsham, in the County of Sussex, and FREDERICK BRABY, of Fitzroy Works, Euston Road, in the County of Middlesex, for an invention for—"Improvements in machinery or apparatus for cleaning boots and shoes, also applicable to the cleaning of other articles." *Provisional protection only.*

JOHNSON. 8th March 1867.

656. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in glove fastenings."—*A communication to him from abroad by Marie Alfred Geminel, of Paris, in the Empire of France.* *Letters Patent sealed.*

TURNER. 8th March 1867.

657. JAMES TURNER, of Queen Street, Stepney, in the County of Middlesex, for an invention for—"An improved composition for coating or covering the surface of iron, wood, stone, brickwork and other substances or materials, to prevent oxidation and decomposition thereof." *Provisional protection only.*

COOK. 8th March 1867.

658. THOMAS COOK, of Pitt Street, Old Kent Road, in the County of Surrey, Engineer and Machinist, for an invention for—"Improvements in sewing-machines."
Provisional protection NOT *granted.*

LAKE. 8th March 1867.

659. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of coating paper and other materials with fluid substances, solutions and compounds, for photographic and other purposes."—*A communication to him from abroad by John Cushing Crosman, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

DAW. 8th March 1867.

660. GEORGE HENRY DAW, of Threadneedle Street, in the City of London, for an invention for—"Improvements in the construction of cartridges for breech-loading fire-arms." *Letters Patent sealed.*

MACE. 8th March 1867.

661. CHARLES MACE, of No. 14, Green Street, Sunderland, in the County of Durham, Engineer, for an invention for—"Improvements in steam-boilers."
Letters Patent sealed.

WHITAKER.
8th March 1867.

662. JOSEPH WHITAKER, of Farsley, near Leeds, for an invention for—"Improvements in steam-boilers." *Provisional protection only.*

HENRY.
8th March 1867.

663. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for measuring the speed of ships and other vessels, and the velocity of running or flowing water."—*A communication to him from abroad by Louis Alfred Anfonso, of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

HAWTHORN.
8th March 1867.

664. STEPHEN HAWTHORN, of Burslem, in the County of Stafford, China Manufacturer, for an invention for—"Improvements in china and earthenware knobs for locks and latches." *Provisional protection only.*

TURNBULL.
8th March 1867.

665. THOMAS SMART TURNBULL, of Birmingham, in the County of Warwick, Mourning Jeweller and Jet Ornament Manufacturer, for an invention for—"Improvements in mourning and other lockets, which improvements may also be applied to other dress ornaments." *Letters Patent sealed.*

HORTON.
8th March 1867.

666. JOSHUA HORTON the younger, of Birmingham, in the County of Warwick, Civil Engineer, for an invention for—"Improvements in the manufacture of metallic rollers used in preparing or treating cotton and other fibrous substances." *Provisional protection only.*

DÜMLER.
8th March 1867.

667. GABRIEL DÜMLER, of Namur, in the Kingdom of Belgium, Civil Engineer, for an invention for—"Improvements in lamps for burning petroleum or other mineral oils." *Provisional protection only.*

NEWMAN.
8th March 1867.

668. JAMES NEWMAN, of Small Heath, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of tyres for railway and other wheels." *Provisional protection only.*

ASSELIN.
8th March 1867.

669. JULES EUGÈNE ASSELIN, of No. 42, Rue de Turbigo, in the City of Paris, in the Empire of France, Gentleman, for an invention for—"Improvements in the manufacture of needle cases."—*A communication from Jules Doderet, a person resident at No. 127, Rue Oberkampt, Paris aforesaid.* *Complete specification; Letters Patent sealed.*

CLARK.
8th March 1867.

670. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for facilitating the starting of street or horse railroad and other carriages."—*A communication to him from abroad by Samuel Ward, of New York City, in the United States of America.* *Letters Patent sealed.*

FIELD.
NATION.
9th March 1867.

671. ARTHUR FIELD, of the firm of John, Charles and John Field, of Upper Marsh, Lambeth, and WILLIAM BRYER NATION, of No. 394, Old Kent Road, both in the County of Surrey, for an invention for—"Improvements in ornamenting candles and in apparatus employed for that purpose." *Provisional protection only.*

TIDÉN.
9th March 1867.

672. LORENTZ TIDÉN, of the City of Manchester, Russian Vice-Consul, for an invention for—"Improvements in bearings for railway axles."—*A communication to him from abroad by Claes Adelsköld, Major of the Royal Engineers, in the Kingdom of Sweden.* *Letters Patent sealed.*

LOWE.
9th March 1867.

673. WILLIAM SCOWCROFT LOWE, of New Mills, in the County of Derby, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in or applicable to sizing and dressing machines." *Letters Patent sealed.*

RUPP.
9th March 1867.

674. AUGUSTE RUPP, of No. 82, Boulevard Sébastopol, Paris, in the Empire of France, for an invention for—"Improvements in the mode of regulating the speed of drying cylinders or rollers employed by dyers, scourers and bleachers." *Provisional protection only.*

TONGUE.
9th March 1867.

675. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in bridles and reins connected therewith—*A communication to him from abroad by Samuel Brubaker Hartman, of Millersville, in the County of Lancaster and State of Pennsylvania, United States of America.* *Letters Patent sealed.*

GISBORNE. 9th March 1867.

676. JOHN SACHEVERELL GISBORNE, of Liverpool, in the County of Lancaster, Electrical Engineer, for an invention for—"Improved means and apparatus for protecting the needles of mariners' and other compasses from local attraction."

Letters Patent sealed.

MENNONS. 9th March 1867.

677. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"Improvements in the construction of breech-loading fire-arms."—*A communication from Henry Moore, a person resident at No. 14, Rue Auber, Paris, in the Empire of France.* *Letters Patent sealed*

GLOVER. 9th March 1867.

678. GEORGE GLOVER, of Ranelagh Road, Pimlico, in the County of Middlesex, for an invention for—"Improvements in lamps for burning naptha and like fluids."—*A communication to him from abroad by Laslo Chandor, a person resident at Great Stable Street, St. Petersburgh.* *Letters Patent sealed.*

NAPIER. 9th March 1867.

679. ROBERT DAVID NAPIER, of 20, Church Row, Limehouse, in the County of Middlesex, for an invention for—"Improvements in apparatus connected with steam-boilers." *Letters Patent sealed.*

WALKER. PFLAUM. 9th March 1867.

680. BENJAMIN WALKER, of Leeds, Engineer, and JOHN FREDERICK AUGUSTUS PFLAUM, also of Leeds, Engineer, for an invention for—"Improvements in machinery for crushing stones, minerals and other like substances."

Provisional protection only.

MILLAR. 11th March 1867.

681. ADAM MILLAR, Mechanician, residing at Number Nineteen, John Street, Pentonville, London, in the County of Middlesex, for an invention for—"Improvements in stamps or presses for marking the prices of goods, part of which invention is applicable to other stamps or presses." *Provisional protection only.*

HILL. 11th March 1867.

682. HENRY CHEETHAM HILL, of Stalybridge, in the County of Chester, Manager, for an invention for—"Improvements in machinery for winding yarn and thread." *Provisional protection only.*

CAVANAGH. 11th March 1867.

683. MICHAEL CAVANAGH, of Kensington, in the County of Middlesex, for an invention for—"A new or improved sash fastening." *Provisional protection only.*

BONNEVILLE. 11th March 1867.

684. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved means of preserving solutions of certain plants and matters in a concentrated state—*A communication from Clémence d'Estains, Widow of Léon de Wailly, a person resident at Rue de Chaillot, 74, Paris aforesaid.*

Complete specification; Letters Patent sealed.

BLACKHAM. 11th March 1867.

685. JOSEPH JOSIAH BLACKHAM, of Birmingham, in the County of Warwick, Patent Brooch Fastening Manufacturer, for an invention for—"Improvements in brooch and other fastenings." *Provisional protection only.*

NATION. 11th March 1867.

686. WILLIAM BRYER NATION, of No. 394, Old Kent Road, in the County of Surrey, for an invention for—"Improvements in apparatus for raising, forcing, propelling and exhausting fluids and gases." *Provisional protection only.*

KIMBALL. 11th March 1867.

687. ALONZO KIMBALL, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

RYDING. 11th March 1867.

688. FREDERICK RYDING, of Lower Glentworth Street, in the County of the City of Limerick, Ireland, Surgeon Dentist, for an invention for—"Improvements in baking or hardening vulcanite or dental india-rubber and other similar compounds and preparations, and in apparatus employed for such purpose."

Letters Patent sealed.

DUCHAMP. 11th March 1867.

689. PIERRE DUCHAMP, of Rue Vieille Monnaie, No. 3, at Lyons (France), Mechanic, for an invention for—"Improvements in stopping bottles, jars and other like vessels." *Provisional protection only.*

PEARSON. 11th March 1867.

690. JOSEPH PEARSON, of Birmingham, in the County of Warwick, Brass Finisher, for an invention for—"Improvements in ball or supply valves."

Provisional protection only.

FENBY. 11th March 1867.

691. JOSEPH BEVERLEY FENBY, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in connecting door and other knobs to their spindles." *Provisional protection only.*

HUGHES. 11th March 1867.

692. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"An improved apparatus for the promotion of economy in the combustion of gas, petroleum and other oils."—*A communication to him from abroad by Oscar Louis and Jean Hoedemaker, of Anvers, in the Kingdom of Belgium.* *Provisional protection only.*

DEMPSEY. 11th March 1867.

693. WILLIAM DEMPSEY, of Congleton, in the County of Chester, for an invention for—"Improvements in machinery or apparatus for spinning and doubling silk, cotton, wool or other fibrous materials." *Letters Patent sealed.*

NICOLL. 11th March 1867.

694. DONALD NICOLL, of Oakland's Hall, West End, Kilburn, in the County of Middlesex, Esquire, for an invention for—"Improvements in the construction of electric telegraph conductors and in the method of preparing the same, also in the machinery and in the application of certain other machinery and apparatus employed therein." *Letters Patent sealed.*

AKERS. 11th March 1867.

695. WILLIAM AKERS, of The Broad, Hellingly, in the County of Sussex, for an invention for—"Improvements in the construction and adjustment of horse-shoes." *Provisional protection only.*

BOULTON. 11th March 1867.

696. MATTHEW PIERS WATT BOULTON, of Tew Park, Oxfordshire, Esquire, for an invention for—"Improvements in propulsion and in rotary apparatus for giving motion or energy to fluids and receiving motion or energy from them." *Letters Patent sealed.*

CHAMBERLAINE. 11th March 1867.

697. MATTHEW CHAMBERLAINE, of No. 13, Park Row, Kennington Road, in the County of Surrey, for an invention for—"Improvements in washing machines." *Provisional protection only.*

CLARK. 11th March 1867.

698. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in drying threads and fabrics, and in combining apparatus for that purpose."—*A communication to him from abroad by Léon Jarosson and Albert Bastaert, Wholesale Chemists, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

JULLIENNE. 11th March 1867.

699. MARIE JOSEPHINE ELISABETH JULLIENNE, of 29, Boulevart St. Martin, Paris, in the Empire of France, for an invention for—"Improved bath belts to be applied in the bathing vessels." *Complete specification; Letters Patent sealed.*

WILSON. 12th March 1867.

700. ROBERT WILSON, of the firm of Nasmyth, Wilson and Company, of the Bridgewater Foundry, Patricroft, near the City of Manchester, Engineer, for an invention for—"Improvements in the governors of steam and other motive-power engines." *Provisional protection only.*

SODEMAN. 12th March 1867.

701. LOUIS CHARLES SODEMAN, of 4, Blossom Terrace, Commercial Street, Shoreditch, in the County of Middlesex, for an invention for—"Improvements in fastening and unfastening ladies stay's busks." *Provisional protection only.*

BURT. 12th March 1867.

702. THOMAS BURT, of Wandsworth, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in machinery and apparatus for moving mud, sewage, sand, small gravel or other similar matter, from one place to another."—*A communication to him from abroad by James Burt, of Velsen, North Holland.* *Letters Patent sealed.*

WALKER. 12th March 1867.

703. BERNARD PEARD WALKER, of North Road House, Wolverhampton, in the County of Stafford, Engineer, for an invention for—"Improvements in valves for steam-engines and other purposes." *Letters Patent sealed.*

CORLETT. 12th March 1867.

704. HENRY LEE CORLETT, of Inchicore, in the County of Dublin, Associate of the Institution of Civil Engineers, for an invention for—"Improvements in buffing springs and parts connected therewith." *Letters Patent sealed.*

HATTON. 12th March 1867.

705. THOMAS HATTON, of No. 2, Ship Street, Brighton, Printer, for an invention for—"Improvements in producing transparent pictures for exhibition in magic lanterns, by a cheaper and easier method than heretofore." *Provisional protection only.*

PARKINSON. SWEANEY. 12th March 1867.

706. ABNER PARKINSON, and DAVID SWEANEY, of the City of Manchester, in the County of Lancaster, Iron and Tin Plate Workers and Galvanizers, for an invention for—"A combined slop pail and night commode." *Provisional protection only.*

BRINJES. 12th March 1867.

707. JOHN FREDERICK BRINJES, of Fieldgate Street, Whitechapel, in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery or apparatus for the manufacture and re-burning of animal charcoal, and for distilling shale and other like substances." *Letters Patent sealed.*

FOX. 12th March 1867.

708. JOHN FOX, of No. 3, Navarino Grove, West Hackney, Engineer, for an invention for—"Improvements in filters." *Letters Patent sealed.*

MASCHWITZ. 12th March 1867.

709. CHARLES MASCHWITZ the younger, of Birmingham, in the County of Warwick, Merchant, for an invention for—"Improvements in taps and valves."—*A communication to him from abroad by Manuel Grumbach, of Frankfort-on-Maine.* *Provisional protection only.*

FUSSELL. 2th March 1867.

710. JAMES ALFRED FUSSELL, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of hat and coat hooks, and in attaching knobs and ornaments to various articles." *Letters Patent sealed.*

TRIMBLE. 12th March 1867.

711. WILLIAM TRIMBLE, of the City of Glasgow, Flax Spinner, for an invention for—"Improvements in preparing flax, hemp, china grass, formium tenax, jute and other vegetable fibrous substances for spinning." *Letters Patent sealed.*

HALL. 12th March 1867.

712. WILLIAM HALL, of Bradford, in the County of York, Manufacturer, for an invention for—"An improved combination of apparatus for winding and twisting certain species of yarns." *Provisional protection only.*

NORTON. 12th March 1867.

713. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in machinery for washing and cleansing wool and other fibrous materials." *Provisional protection only.*

WOOD. 12th March 1867.

714. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in machines for 'grinding' or tearing up rags and other fibrous substances." *Provisional protection only.*

WILLCOCK. MASON. 13th March 1867.

715. JOSEPH WILLCOCK, of Stockport, County of Chester, Engineer, and SAMUEL MASON, junior, of Manchester, County of Lancaster, Engineer, for an invention for—"Improvements in the construction of wheel moulding machines." *Letters Patent sealed.*

SLEATH. HARGREAVES. 13th March 1867.

716. WILLIAM JAMES SLEATH, of Bacup, in the County of Lancaster, Cotton Spinner and Manufacturer, and JOHN HARGREAVES, junior, of the same place, Reed and Heald Manufacturer, for an invention for—"Improvements in the manufacture of healds employed in looms for weaving." *Provisional protection only.*

MENNONS. 13th March 1867.

717. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"Improvements in breech-loading fire-arms and in cartridges for the same."—*A communication from Emile d'Erlanger, a person resident at No. 20, Rue Taitbout, Paris, France.* *Letters Patent sealed.*

THÈVENET. 13th March 1867.

718. JUSTIN THÈVENET, of Mont-sur-Marchienne lez Charleroy, in the Kingdom of Belgium, Civil Engineer, for an invention for—"Improvements in the slide valves of steam-engines." *Complete specification; Letters Patent sealed.*

BOYD. 13th March 1867.

719. JOHN BOYD, of Glasgow, in the County of Lanark, North Britain, Engineer and Machine Maker, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

WALKER. WALKER. 13th March 1867.

720. THOMAS WALKER, and THOMAS FERDINAND WALKER, both of Birmingham, in the County of Warwick, Engineers, for an invention for—"Improvements in apparatus for measuring the passage or flow of liquids." *Letters Patent sealed.*

HAMILTON. 13th March 1867.

721. JOHN HAMILTON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved artificial material for producing gas to be used for illuminating purposes." *Letters Patent sealed.*

NEWTON. 13th March 1867.

722. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements applicable to the ventilation of theatres, churches and other large buildings, and in purifying and cooling the air supplied thereto."—*A communication to him from abroad by Henri Cabanes, of Rue St. Sebastien, Paris, in the Empire of France.*
Provisional protection only.

GLOVER. 13th March 1867.

723. FREDERICK ROBERT AUGUSTUS GLOVER, of Brading, in the Isle of Wight, Master of Arts, Cambridge, for an invention for—"Improvements in the tackle for and in the manner of letting down and weighing anchors on ship-board."
Letters Patent sealed.

HENRY. 13th March 1867.

724. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the method of and apparatus for supplying beer and similar beverages to the purchaser or consumer."—*A communication to him from abroad by Henry Giraldon, of 33, Boulevart Saint Martin, Paris, France.*
Provisional protection only.

RUMBLOW. KENDALL. 13th March 1867.

725. GEORGE RUMBELOW, and HENRY KENDALL, of Bury St. Edmunds, in the County of Suffolk, for an invention for—"Improvements in rollers for rolling land."
Letters Patent sealed.

WOOTTON. 13th March 1867.

726. WILLIAM WOOTTON, of No. 126, Westminster Bridge Road, in the County of Surrey, for an invention for—"Improvements in instruments used in the sockets of candlesticks to secure candles therein."
Letters Patent sealed.

GRIFFITH. 13th March 1867.

727. JOHN GRIFFITH, of Menai Bridge, in the County of Anglesey, for an invention for—"Improvements in applying wind power for working ships' pumps."
Letters Patent sealed.

PLATT. 13th March 1867.

728. BENJAMIN PLATT, of Liverpool, in the County of Lancaster, for an invention for—"Improvements in and apparatus for the manufacture of chloride of lime."
Letters Patent sealed.

MORRELL. 13th March 1867.

729. JAMES CONYERS MORRELL, of Leyland, in the County of Lancaster, for an invention for—"Improvements in apparatus applicable to dry closets, for disinfecting and deodorising and preparing manure, parts of which are applicable to the separating of cinders from ashes."
Letters Patent sealed.

ESPLEN. BLAND. 13th March 1867.

730. WILLIAM ESPLEN, of Liverpool, in the County of Lancaster, Engineer, and JAMES JOHN BRIGGS BLAND, of the same place, Architect, for an invention for —"Improvements in signalling apparatus and in the liquid to be used therewith, and which liquid not being subject to congelation may be used as a vehicle for communicating power."
Letters Patent sealed.

HALLIDAY. 13th March 1867.

731. MICHAEL FREDERICK HALLIDAY, of South Kensington, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms."
Provisional protection only.

LEE. 13th March 1867.

732. EDWARD LEE, of No. 247, High Holborn, in the County of Middlesex, Lithographer, for an invention for—"An improved mode of and means for producing pictures, designs, letters, and other characters or figures upon glass, metal, wood and other materials."
Letters Patent sealed.

READ. 14th March 1867.

733. WILLIAM READ, of Newton Heath, near the City of Manchester, Millwright, for an invention for—"Improvements in machinery for boring and excavating coal and other minerals."
Provisional protection only.

SMITH. 14th March 1867.

734. HUGH SMITH, of Much Hadham, in the County of Herts, for an invention for—"Improvements in preparing turnips and mangel wurzel for the food of animals."
Provisional protection only.

CLARKE. 14th March 1867.

735. SAMUEL CLARKE, of 110, Albany Street, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in candlesticks."
Provisional protection only.

DANCER. 14th March 1867.

736. JOHN BENJAMIN DANCER, of No. 43, Cross Street, in the City of Manchester, in the County of Lancaster, Mathematical Instrument Maker, for an invention for—"Improvements in instruments for ascertaining the speed of machinery."
Letters Patent sealed.

BLAGDEN.
14th March 1867.

737. WILLIAM GEORGE BLAGDEN, of Hackney Wick, in the County of Middlesex, for an invention for—"Improvements in extracting silver from alloys of zinc with lead."—*A communication to him from abroad by Francisco Marquez-Millan, of No. 7, Rue Liandier, Marseilles, in the Empire of France. Provisional protection only.*

GOODWIN.
14th March 1867.

738. PAUL THOMAS GOODWIN, of Camden Street, Camden Town, in the County of Middlesex, Engineer, for an invention for—"Improvements in the construction of retorts for re-burning animal charcoal." *Letters Patent sealed.*

FERGUSON.
14th March 1867.

739. JAMES FERGUSON, of Helensburgh, in the County of Dumbarton, North Britain, for an invention for—"A certain improved mode of applying screw propellers, by means of which a greater efficiency is obtained." *Provisional protection only.*

NEWTON.
14th March 1867.

740. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of boxes for containing, preserving and transporting butter and cheese and other articles."—*A communication to him from abroad by William Bellamy Guernsey, of Norwich, in the State of New York, United States of America. Provisional protection only.*

HAMER.
DAVIES.
14th March 1867.

741. WILLIAM HAMER, of Manchester, Cotton Spinner, and JOSEPH DAVIES, of Bowden, in the County of Chester, Salt Proprietor, for an invention for—"Improvements in supplying heated air to furnaces and fires, and in apparatus connected therewith, which apparatus is also applicable to burning smoke." *Provisional protection only.*

BARAGWANATH.
14th March 1867.

742. JOHN PHILLIPS BARAGWANATH, of the firm of J. P. Baragwanath and Co., Engineers, of No. 153, Upper Thames Street, in the City of London, for an invention for—"An improved cramping and lifting apparatus."—*A communication to him from abroad by Henry Hitchings Baragwanath, of the City, County and State of New York, United States of America. Provisional protection only.*

KEYMER.
WHITEHEAD.
15th March 1867.

743. JAMES KEYMER, and WILLIAM WHITEHEAD, Dartford, Kent, Printers, for an invention for—"Improvements in dyeing and printing." *Provisional protection only.*

PARKINSON.
15th March 1867.

744. JAMES ROBINSON PARKINSON, of Blackburn, in the County of Lancaster, Chemist, for an invention for—"An improved varnish or composition to be applied to healds of looms for weaving and for other similar uses." *Provisional protection only.*

WESTWOOD.
BAILLIE.
15th March 1867.

745. JOSEPH WESTWOOD, of Tredegar House, Bow, in the County of Middlesex, Engineer, and ROBERT BAILLIE, of Leyton, in the County of Essex, Engineer, for an invention for—"A method of protecting the outer surface or external parts of iron ships from corrosion or from animal or vegetable matter." *Letters Patent sealed.*

GRAVELEY.
EWING.
15th March 1867.

746. WILLIAM HENRY GRAVELEY, and JAMES EWING, of Upper East Smithfield, in the County of Middlesex, Engineers and Manufacturers, for an invention for—"Improvements in steam cooking and baking apparatus." *Provisional protection only.*

PLENTY.
15th March 1867.

747. EDWARD PELLEW PLENTY, of the Eagle Iron Works, Newbury, in the County of Berks, for an invention for—"Improvements in the construction and arrangement of steam-engines for the propulsion of boats and other vessels." *Letters Patent sealed.*

JOHNSON.
15th March 1867.

748. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in dyeing carded or combed wool or hair."—*A communication to him from abroad by Arthur Talon and Edmond Solignac, of Paris, in the Empire of France. Provisional protection only.*

CRAUSE.
15th March 1867.

749. PERCY CRAUSE, of 16, Dorset Place, Dorset Square, in the County of Middlesex, Gentleman, for an invention for—"Improvements in propelling boats, ships and other vessels." *Provisional protection only.*

NEWTON.
15th March 1867.

750. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in spinning machinery."—*A communication to him from abroad by Constant Peugeot, of Rue St. Sebastien, Paris, in the Empire of France. Letters Patent sealed.*

NEWTON. 15th March 1867.

751. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of bale tie or fastening."—*A communication to him from abroad by Osborne Macdaniel, of New York City, in the United States of America.* *Provisional protection only.*

SMITH. 15th March 1867.

752. GEORGE SMITH, of St. George's Terrace, Headingley, Leeds, in the County of York, for an invention for—"Improvements in the preparation of soap adapted more especially for the scouring of wool and woollen yarns." *Letters Patent sealed.*

THOMPSON. 15th March 1867.

753. NATHAN THOMPSON, of No. 15, Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in connecting the ends of pipes and tubes." *Letters Patent sealed.*

HARPER. 15th March 1867.

754. JOHN POVEY HARPER, of 7, Regent Terrace, London Road, Derby, Mining Engineer, for an invention for—"Improved safety apparatus for mining cages, hoists and lifts." *Provisional protection only.*

LAKE. 15th March 1867.

755. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in rotary engines and pumps."—*A communication to him from abroad by Dexter Davis Hardy, of Covington, Kentucky, United States of America.* *Letters Patent sealed.*

COWBURN. 16th March 1867.

756. THOMAS COWBURN, of the Safety Valve Works, Manchester, in the County of Lancaster, Engineer, for an invention for —"Improvements in boilers or steam generators and in valves or plugs connected therewith." *Letters Patent sealed.*

DUNN. 16th March 1867.

757. THOMAS DUNN, of Pendleton, in the County of Lancaster, Engineer, for an invention for—"Improvements in boilers and apparatus for generating steam and evaporating fluids." *Letters Patent sealed.*

NOUGARET. 16th March 1867.

758. EMILE NOUGARET, of No. 82, Boulevard Sebastopol, in the City of Paris, in the Empire of France, Hat and Cap Manufacturer, for an invention for —"Improved apparatus for pouncing hats." *Letters Patent sealed.*

MILNER. 16th March 1867.

759. JOHN MILNER, of No. 13, Buckingham Street, Strand, in the County of Middlesex, for an invention for—"Improvements in slide valve gear for steam-engines." *Provisional protection only.*

HARRIS. 16th March 1867.

760. WILLIAM RANDAL HARRIS, of the City of Manchester, in the County of Lancaster, Machinist, for an invention for —"An improved belt hook or fastener for piecing driving and other belts or bands."—*A communication to him from abroad by Frederick Greenleaf Wilson, of Lowell, Massachusetts, United States of America.* *Letters Patent sealed.*

MENNONS. 16th March 1867.

761. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"Improvements in breech-loading fire-arms."—*A communication from Benjamin Stone Roberts, Major General, United States Service, a person resident at No. 14, Rue Auber, Paris, in France.* *Provisional protection only.*

GRUNDY. 16th March 1867.

762. JOHN GRUNDY, of Wolstenholme Hall, in the County of Lancaster, for an invention for—"Certain improvements in apparatus applicable for the prevention of smoke." *Letters Patent sealed.*

KENNEDY. 16th March 1867.

763. JOHN KENNEDY, of the firm of John Law and Company, of Glasgow, in the County of Lanark, North Britain, Ironfounders, for an invention for—"Improvements in annealing or treating cast-iron articles." *Provisional protection only.*

HUTSON. 16th March 1867.

764. GUYBON HUTSON, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in steering apparatus." *Provisional protection only.*

CANHAM. 16th March 1867.

765. RICHARD CANHAM, of Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in means or apparatus for sharpening knives and other edged articles, which improvements are also applicable to grinding and polishing various surfaces." *Provisional protection only.*

HICKISSON. 16th March 1867.

766. JAMES HICKISSON, of 75, Southgate Road, in the County of Middlesex, Manufacturer, for an invention for—"An improved preparation of biscuit and other pastry and bread." *Letters Patent sealed.*

HOLNESS. 16th March 1867.

767. STEPHEN HOLNESS, of No. 2, Albany Terrace, Victoria Park, in the County of Middlesex, for an invention for —"Improvements in the mode or means of rotating brushes or other articles for which a circular or revolving motion is required." *Letters Patent sealed.*

SHEDDEN. 16th March 1867.

768. THOMAS SHEDDEN, of Ardgarton House, Parish of Lochgoilhead, Argyleshire, North Britain, for an invention for —"Improvements in breech-loading fire-arms." *Letters patent sealed.*

NEWTON. 16th March 1867.

769. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in breech-loading fire-arms."—*A communication to him from abroad by Silas Crispin, of the City of New York, in the United States of America.* *Letters Patent sealed.*

ELLIOT. 16th March 1867.

770. ALEXANDER JAMES HARDY ELLIOT, Lt.-Colonel in Her Majesty's Army, for an invention for—"Producing and applying a self-acting mechanical power for working machinery." *Provisional protection* NOT *granted.*

ALLEN. 16th March 1867.

771. EDWARD ELLIS ALLEN, of 40, Parliament Street, in the County of Middlesex, Engineer, for an invention for —"Improvements in steam-engines and boilers." *Provisional protection only.*

SHAND. 16th March 1867.

772. JAMES SHAND, of the firm of Shand, Mason and Company, of Upper Ground Street, Blackfriars Road, in the County of Surrey, for an invention for —"Improvements in steam fire-engines and boilers, such improvements being applicable to other purposes." *Letters Patent sealed.*

BAILEY. 18th March 1867.

773. WILLIAM HENRY BAILEY, of the Albion Works, Salford, in the County of Lancaster, Brass Founder, Turret Clock and Steam Guage Manufacturer, for an invention for—"A travelling trunk, bath and cradle combined." *Provisional protection only.*

SMITH. 18th March 1867.

774. JOHN SMITH, of High Crompton, near Oldham, in the County of Lancaster, Manager, for an invention for—"Improvements in the process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes." *Letters Patent sealed.*

NICHOLSON. 18th March 1867.

775. THOMAS WILLIAM NICHOLSON, of No. 3, Bell Yard, Gracechurch Street, in the City of London, Lithographer, for an invention for—"Lithographic stone grinding, graining, polishing, and ink and colour grinding apparatus." *Provisional protection* NOT *granted.*

WENHAM. 18th March 1867.

776. FRANCIS HERBERT WENHAM, of 1, Union Road, Clapham, in the County of Surrey, Engineer, for an invention for —"Improvements in heated air engines." *Letters Patent sealed.*

NEWCOME. 18th March 1867.

777. HENRY JUSTINIAN NEWCOME, of 49, King William Street, in the City of London, for an invention for—"Improved apparatus for warming or heating buildings." *Provisional protection only.*

SIMMS. 18th March 1867.

778. HENRY SIMMS, of Gay Street, Bath, in the County of Somerset, Music Seller, for an invention for—"Improved apparatus to be used in connection with pianofortes." *Letters Patent sealed.*

PARSONS. 18th March 1867.

779. WILLIAM HENRY PARSONS, Engineer, of Port Tennant Copper Works, Swansea, in the County of Glamorgan, for an invention for —"Improvements in setting boilers and in safety valves for the same." *Letters Patent sealed.*

ELLIS. HILLAS. 18th March 1867.

780. DEMAS ELLIS, and MATTHEW HILLAS, both of Dudley Hill, in the Parish of Bradford, in the County of York, Worsted Stuff Manufacturers, for an invention for—"Improvements in weaving." *Provisional protection only.*

SMITH. 18th March 1867.

781. JOSEPH SMITH, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"Improvements in gun locks." *Provisional protection only.*

MOORE. MCNEAL. 18th March 1867.

782. ALVIN WALES MOORE, and ELIAS MCNEAL, both of Holloway, in the County of Middlesex, for an invention for—"A new or improved spring shank applicable to boots and shoes, and in the machinery employed therein." *Letters Patent sealed.*

ROBINSON.
19th March 1867.

783. JOHN ROBINSON, of Greenfield, in the County of York, for an invention for —"Improvements applicable to steam-boilers and engines, for economizing fuel in the generation of steam, and in the apparatus connected therewith."
Complete specification; Letters Patent sealed.

HARVIE.
19th March 1867.

784. EDWIN HARVIE, of No. 10, Rheidal Terrace, Islington, in the County of Middlesex, for an invention for—"Improvements in the means or apparatus for raising carriage heads." *Provisional protection only.*

COOKE.
19th March 1867.

785. CHARLES FREDERICK COOKE, of the Buckingham Works, in the City of York, Engineer, for an invention for—"Certain improvements in safety valves for steam-boilers." *Letters Patent sealed.*

SIEVIER.
19th March 1867.

786. JOHN CORNISH HARCOURT SIEVIER, of Upper Holloway, in the County of Middlesex, for an invention for—"Improvements in the construction of ordnance."
Provisional protection NOT *granted.*

GREGORY.
19th March 1867.

787. FRANCIS GREGORY, of the firm of Gregory and Haynes, of Salford, in the County of Lancaster, Brewery Machinists, for an invention for—"Improvements in machinery or apparatus for refrigerating purposes, used in breweries and distilleries." *Letters Patent sealed.*

HART.
PARRY.
19th March 1867.

788. ALFRED HENRY HART, of No. 22, Gresham Street, in the City of London, Manufacturer, and WILLIAM PARRY, of Birmingham, in the County of Warwick, Mineral Surveyor, for an invention for—"Improvements in treating or purifying sewage and in apparatus to be used for that purpose." *Letters Patent sealed.*

ALLHUSEN.
19th March 1867.

789. CHRISTIAN ALLHUSEN, of Newcastle-upon-Tyne, Chemical Manufacturer, for an invention for—"An improved mode of treating small pyrites and pyrites' dust so as to obtain sulphur therefrom." *Letters Patent sealed.*

HISLOP.
19th March 1867.

790. JAMES HISLOP, Manager of the Gas Works, Ayr, North Britain, for an invention for—"Improvements in the arrangement of apparatus for 'scurfing,' or removing carbon from gas retorts." *Letters Patent sealed.*

SEMPLE.
19th March 1867.

791. MATTHEW SEMPLE, of Axminster, in the County of Devon, Gentleman, for an invention for—"An improved mode of and apparatus for warming and ventilating buildings." *Provisional protection only.*

NEWTON.
19th March 1867.

792. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by James Sewell McCurdy, of Brooklyn, in the State of New York, United States of America.*
Letters Patent sealed.

CLEMENTS.
19th March 1867.

793. JAMES MOORE CLEMENTS, of Birmingham, in the County of Warwick, Tailor and Draper, for an invention for—"Improvements in ironing, pressing, finishing and damping machinery." *Letters Patent sealed.*

CAMERON.
19th March 1867.

794. ADAM SCOTT CAMERON, of the City, County and State of New York, United States of America, for an invention for—"Improvements in the construction and arrangement of the connections and casings of lock-up or protected safety valves for steam generating apparatus." *Complete specification; Letters Patent sealed.*

JOHNSON.
19th March 1867.

795. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in printing hanks or skeins of silk, cotton, wool and other like fibrous materials."—*A communication to him from abroad by Louis Charles Aubry, of Paris, in the Empire of France.*
Provisional protection only.

AVELING.
19th March 1867.

796. THOMAS AVELING, of Rochester, in the County of Kent, Engineer, for an invention for—"Improvements in steam road rollers." *Letters Patent sealed.*

MCADAM.
SCHUMAN.
19th March 1867.

797. WILLIAM MCADAM, and SIGISMUND SCHUMAN, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved casing for protecting bottles or other similar articles, also an improved arrangement of machinery or apparatus for manufacturing such casing." *Letters Patent sealed.*

STURTEVANT.
19th March 1867.

798. EDWARD LEWIS STURTEVANT, of Boston, County of Suffolk and State of Massachusetts, United States of America, for an invention for—"An improved breech-loading fire-arm." *Complete specification; Letters Patent sealed.*

CLARK. 19th March 1867.

799. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the disaggregation of china grass, hemp, flax, jute, phormium tenax and other vegetable fibres, for the production of threads, fabrics, and pulp for paper."—*A communication to him from abroad by François Mathurin Caillard, of 29, Boulevart St Martin, Paris.*
Letters Patent sealed.

PORTLOCK. 19th March 1867.

800. JOHN PORTLOCK, of Globe Yard, South Molton Street, in the County of Middlesex, Gun Maker, for an invention for—"Improvements in apparatus for operating the extractor of breech-loading drop guns." *Provisional protection only.*

COLLYER. 20th March 1867.

801. ROBERT HANHAM COLLYER, of Seafield Works, Dundee, North Britain, M.D., for an invention for—"Improvements in means or apparatus employed for treating flax, hemp, jute, china grass or other similar fibrous materials."
Provisional protection only.

GOODWIN. 20th March 1867.

802. PAUL THOMAS GOODWIN, of Camden Street, Camden Town, in the County of Middlesex, Engineer, for an invention for—"Improvements in apparatus for driving revolving retorts and cylinders." *Provisional protection only.*

YATES. 20th March 1867.

803. JOHN WILLIAM YATES, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the handles of spades, shovels and forks, and other similar articles." *Letters Patent sealed.*

MACE. 20th March 1867.

804. THOMAS KEMP MACE, of Birmingham, in the County of Warwick, Hatter, for an invention for—"Improvements in securing door and other knobs to their spindles." *Letters Patent sealed.*

MENNONS. 20th March 1867.

805. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"Improvements in central-fire cartridges for breech-loading fire-arms."—*A communication from Benjamin Stone Roberts, Major General, United States service, a person resident at No. 14, Rue Auber, Paris, in France. Provisional protection only.*

TYLER. 20th March 1867.

806. SIDNEY MASON TYLER, of Brooklyn, in the State of New York, United States of America, for an invention for—"Improvements in sewing-machines."
Letters Patent sealed.

LAURENT. 20th March 1867.

807. GILBERT AMABLE LAURENT, of No. 22, Rue des Garceaux, Moulins, in the Empire of France, Civil Engineer, for an invention for—"Improvements in apparatus for stopping or retarding railway trains." *Provisional protection only.*

SMITH. 20th March 1867.

808. BENJAMIN JACKSON SMITH, of Tangier Place, Eton, for an invention for—"Improvements in apparatus for protecting watches in the pocket."
Letters Patent sealed.

SWANN. 20th March 1867.

809. JOHN RUSSELL SWANN, of Windsor College, Montgomery Street, Edinburgh, for an invention for—"Improvements in steam-boilers and in apparatus for heating the same, and also for obtaining heat for other purposes."
Letters Patent sealed.

BISCHOF. 20th March 1867.

810. GUSTAV BISCHOF, junior, of 14, Poppelsdorfer Allée, Bonn, in the Kingdom of Prussia, for an invention for—"Improvements in coating metals and in apparatus employed therein and for like purposes." *Letters Patent seale*

CHAMBERS. 20th March 1867.

811. GEORGE CHAMBERS, of 8, Parade, Northampton, for an invention for—"Improvements in apparatus for exhibiting cloths and fabrics."
Letters Patent sealed.

LEEMING. 20th March 1867.

812. JOHN LEEMING, of North Holme Mills, Bradford, in the County of York, Machine Maker, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

STEWART. 21st March 1867.

813. DAVID YOOLOW STEWART, of Glasgow, in the County of Lanark, North Britain, Ironfounder, for an invention for—"Improvements in core bars and studs to be used for casting iron pipes and similar articles." *Letters Patent sealed.*

MARCHISIO. 21st March 1867.

814. GIACOMO EDUARDO MARCHISIO, of Baker Street, Portman Square, in the County of Middlesex, Doctor of Medicine and Practical Chemist, for an invention for—"Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes." *Provisional protection only.*

BOOTH. 21st March 1867.

815. JAMES BOOTH, of Halifax, in the County of York, Stuff Manufacturer, for an invention for—"Improvements in the manufacture of textile fabrics and in the means or apparatus employed therein." *Letters Patent sealed.*

SIMPSON. 21st March 1867.

816. JOHN HAWKINS SIMPSON, of Kilmeena, in the County of Mayo, in Ireland, for an invention for—"Certain improvements in printing telegraphs and in apparatus connected therewith." *Letters Patent sealed.*

CLIFTON. 21st March 1867.

817. HENRY CLIFTON, of New Bond Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in coolers for wine and other liquids and substances, and in vessels for protecting liquids and other substances from undesired effects of the atmosphere or atmospheric temperature, also in covers or stoppers for the same and other articles." *Provisional protection only.*

CLIFTON. 21st March 1867.

818. HENRY CLIFTON, of New Bond Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in refrigerators, ice safes and preserving cabinets." *Letters Patent sealed.*

GREENSHIELDS. 21st March 1867.

819. JAMES GREENSHIELDS, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved compound or combination of materials to be used for the production of illuminating gas." *Letters Patent sealed.*

CLARK. 21st March 1867.

820. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in central-fire cartridges."—*A communication to him from abroad by Jules Félix Gévelot, Manufacturer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

LATTER. 21st March 1867.

821. LEONARD LATTER, of Catford Bridge, Lewisham, in the County of Kent, Miller, for an invention for—"Improvements in brakes for common road carriages." *Provisional protection only.*

LIMBERT. 21st March 1867.

822. JAMES ALFRED LIMBERT, of Gravesend, in the County of Kent, for an invention for—"Improvements in machinery or apparatus for raising, lowering and moving heavy bodies, which improvements are also applicable for operating punching machines, screw presses, and the feed motion of circular and other saws and wood planing machines." *Letters Patent sealed.*

LORBERG. 21st March 1867.

823. WILLIAM LORBERG, of Danvers Street, Chelsea, in the County of Middlesex, for an invention for—"Improvements in the construction of urinals, waterclosets and other similar vessels." *Provisional protection only.*

NEWTON. 21st March 1867.

824. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in chronometers, watches and other timekeepers."—*A communication to him from abroad by Jean Aimé Jacob, of Rue St. Sebastien, Paris, in the Empire of France.* *Provisional protection only.*

HART. 21st March 1867.

825. HERBERT WILLIAM HART, of Springwell Lodge, Clapham Common, in the County of Surrey, Engineer, for an invention for—"An improved process for producing indestructible photographic pictures." *Provisional protection only.*

PLAYER. 21st March 1867.

826. WILLIAM DREDGE PLAYER, of the firm of Player Brothers, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in covers for the tops of bottles, jars and other vessels." *Letters Patent sealed.*

HASELTINE. 21st March 1867.

827. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved steam heating and ventilating apparatus."—*A communication to him from abroad by Adolph Sternfeld, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

LAKE. 22nd March 1867.

828. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved apparatus for separating the grounds from the liquid in making coffee."—*A communication to him from abroad by Henry Josiah Griswold, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

KAUFMANN. 22nd March 1867.

829. CHARLES KAUFMANN, of No. 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"An improvement in collars, cuffs and similar articles composed of paper or of paper and tissue combined." *Letters Patent sealed.*

CROSS. EVANS. 22nd March 1867.

830. GEORGE CROSS, and RICHARD EVANS, both of Winsford, in the County of Cheshire, Salt Manufacturers, for an invention for—"Improvements in furnaces for evaporating brine and for other heating purposes." *Provisional protection only.*

DICKENSON. 22nd March 1867.

831. PETER DICKENSON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in the construction of fences, hurdles and gates." *Provisional protection only.*

GIBSON. 22nd March 1867.

832. WILLIAM WALKER GIBSON, of Edinburgh, in the County of Midlothian, North Britain, for an invention for—"Improvements in decorticating cereals and in the machinery or apparatus employed therefor." *Letters Patent sealed; no specification filed.*

WINDER. 22nd March 1867.

833. JOHN HATHORNTHWAITE WINDER, of Sheffield, in the County of York, Manufacturer, for an invention for—"An improved rotary pump for raising or forcing fluids." *Provisional protection only.*

LITTLE. 22nd March 1867.

834. GEORGE LITTLE, of Oldham, in the County of Lancaster, Mechanical Engineer, for an invention for—"Improvements in machinery for combing cotton, wool and other fibrous materials." *Letters Patent sealed.*

TUCKER. 22nd March 1867.

835. EDWARD SAMUEL TUCKER, of Stamford Street, in the County of Surrey, Glass Manufacturer, for an invention for—"Improvements in globular and other forms of glass for ornamenting mirrors and other reflecting surfaces, and for making up other articles of glass." *Provisional protection only.*

WHITLEY. 22nd March 1867.

836. JOSEPH WHITLEY, of the Railway Brass Works, Leeds, in the County of York, for an invention for—"Improvements in stop valves or taps for steam and water." *Letters Patent sealed.*

LAWSON. 22nd March 1867.

837. JOHN LAWSON, of Leeds, in the County of York, Machinist, for an invention for—"Improvements in machinery for spinning flax, tow, hemp and other fibres." *Letters Patent sealed.*

BOUSFIELD. 22nd March 1867.

838. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in machinery for manufacturing flour."—*A communication to him from abroad by John Brown, of Utica, in the County of Oneida and State of New York, Alexander Hart, of Utica, in the County of Oneida, State of New York, Allen Battey Ralph, James Hobart Cutler, and Dexter Neuton Knight, of the City and County of Providence, in the State of Rhode Island and United States of America. Complete specification; Letters Patent sealed.*

ADAMS. WHITEMAN. 22nd March 1867.

839. GEORGE ADAMS, of No. 48, Great Sutton Street, in the County of Middlesex, Engineer, and WILLIAM THOMAS WHITEMAN, of No. 4, Maitland Park Crescent, in the said County, Gentleman, for an invention for—"Improvements in machines for printing and indenting portions of railway tickets and for other like purposes." *Letters Patent sealed.*

SEDGWICK. 22nd March 1867.

840. SAMUEL SEDGWICK, of Codnor Park, in the County of Derby, Engineer, for an invention for—"Improvements in machinery or apparatus for rolling spikes, nails, bolts or other similar articles, from rods, sheets or bars of iron or other metal or malleable substances, and in preparing, shaping, slitting and manufacturing same, and for the construction of furnaces for heating iron or for other similar purposes." *Letters Patent sealed.*

SPENCER. 22nd March 1867.

841. JOHN SPENCER, of 5, Euston Road, King's Cross, County of Middlesex, for an invention for—"Improvements in machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff." *Letters Patent sealed.*

WILDE. 23rd March 1867.

842. HENRY WILDE, of the City of Manchester, Engineer, for an invention for—"Improvements in electro-magnetic and magneto-electric induction machines." *Letters Patent sealed.*

RAYNER. HEATH. 23rd March 1867.

843. WILLIAM HARRY RAYNER, of 37, Arundel Street, Strand, in the County of Middlesex, Purveyor, and JOHN THOMAS HEATH, Electro Plate Agent, 12, Dyer's Buildings, Holborn, in the City of London, for an invention for—"Improvements in the manufacture of shoulders of the blades of knives, forks and other articles, and of the mode of the application thereof." *Provisional protection only.*

DUNCAN.
23rd March 1867.

844. ROBERT DUNCAN, of Partick, in the County of Lanark, North Britain, Ironfounder and Engineer, for an invention for—"Improvements in cranes."
Letters Patent sealed.

SOLLER.
BARBER.
23rd March 1867.

845. JOHN HENRY SOLLER, and EDWARD BARBER, both of Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in umbrellas and parasols."
Provisional protection only.

GAMGEE.
GAMGEE.
23rd March 1867.

846. JOHN GAMGEE, of 28, Queen's Road, Bayswater, in the County of Middlesex, Veterinary Surgeon, and ARTHUR GAMGEE, of 27, Alva Street, in the City of Edinburgh, Doctor of Medicine, for an invention for—"Improvements in the preservation of animal and vegetable substances."
Letters Patent sealed and specification filed by order.

WATTEEU.
23rd March 1867.

847. EMILE WATTEEU, of Middlesboro'-on-Tees, in the County of York, for an invention for—"An improved nut tapping machine." *Letters Patent sealed.*

HORSFIELD.
23rd March 1867.

848. LOXLEY HORSFIELD, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in machinery for obtaining and giving off motive-power, for the purpose of working the different kinds of machines in any mines, or for hauling, driving or drawing any kind of carriages in mines or other places."
Provisional protection only.

EDWARDS.
23rd March 1867.

849. ERNEST EDWARDS, of 20, Baker Street, Portman Square, in the County of Middlesex, for an invention for—"Improvements in photographic pictures and in apparatus for producing them." *Provisional protection only.*

HANSON.
23rd March 1867.

850. WILLIAM JAMES HANSON, of Bradford, in the County of York, Manager, for an invention for—"Improvements in printing yarns." *Letters Patent sealed.*

HOLLAND.
23rd March 1867.

851. CHARLES MENZIES HOLLAND, of Tan-y-Bwlch, Merionethshire, North Wales, for an invention for—"Improvements in points and crossings of the permanent way of railways and tramways, and the provision of additional safety to the aforesaid points and crossings." *Provisional protection only.*

BOUSFIELD.
23rd March 1867.

852. WILLIAM BOUSFIELD, of Bradford, in the County of York, Worsted Spinner, for an invention for—"Improvements in means or apparatus for spinning and twisting fibrous substances." *Provisional protection only.*

TONGUE.
23rd March 1867.

853. JOHN GARRETT TONGUE, of the Firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in reins for horses."—*A communication to him from abroad by John Muir, Mary Ann Wilson Ringler and Sarah Emma Kelly, all of the City, County, and State of New York, United States of America.*
Letters Patent sealed.

TONGUE.
23rd March 1867.

854. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in jumping or skipping hoops."—*A communication to him from abroad by Charles Lyman Browne, of the City of Brooklyn, in the County of Kings and State of New York, United States of America.*
Provisional protection only.

BOUSFIELD.
23rd March 1867.

855. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in apparatus for extinguishing lamps."—*A communication to him from abroad by Nathaniel Mansfield, a person resident at State Street, Boston, United States of America. Letters Patent sealed.*

BETTELEY.
23rd March 1867.

856. JOSEPH BETTELEY, of 14, Goree Piazza, Liverpool, for an invention for—"Improvements in the manufacture of ships' sheathing, armour sheathing and fastenings." *Letters Patent sealed.*

PEBARDY.
25th March 1867.

857. THOMAS PEBARDY, of 30, Saint Paul's Road, in the Parish of Saint Pancras, in the County of Middlesex, Surgical Bandage and Instrument Maker, for an invention for—"Improvements in stays or artificial support for the human body."
Letters Patent sealed.

FASSMANN.
25th March 1867.

858. HENRY FASSMANN, of New Orleans, Louisiana, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in metal ties or bands for securing bales of cotton or other substance, and in machinery employed in the manufacture of the same." *Letters Patent sealed.*

DAVIES.
25th March 1867.

859. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in rotary digging machines and in teeth for the same."—*A communication to him from abroad by George Granville Lobdell, of Wilmington, State of Delaware, United States of America.*

Letters Patent sealed.

MATTHEWS.
25th March 1867.

860. WILLIAM MATTHEWS, of Tipton, in the County of Stafford, for an invention for—"An improved means of draining mines, coal pits and other places from whence it is desired to raise water." *Provisional protection only.*

JOHNSON.
25th March 1867.

861. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the treatment of wool and other animal textile materials, whether in a raw or manufactured state."—*A communication to him from abroad by Jean Baptiste Frezon the elder, of Paris, in the Empire of France, Chemist.* *Letters Patent sealed.*

HIGGINS.
25th March 1867.

862. ROBERT HIGGINS, of Marchwood Park, in the County of Southampton, Land Steward, for an invention for—"Improvements in cultivating land and in apparatus employed therein." *Letters Patent sealed.*

WYLEY.
25th March 1867.

863. ANDREW WYLEY, of Barker Street, Aston Manor, in the County of Warwick, Geological Surveyor, for an invention for—"Improvements in breech-loading fire-arms and bayonets for the same." *Letters Patent sealed.*

NEWTON.
25th March 1867.

864. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery for cutting channels in stone and for working in quarries."—*A communication to him from abroad by George Jeffards Wardwell, of Rutland, in the State of Vermont, United States of America.* *Letters Patent sealed.*

PARKES.
25th March 1867.

865. ALEXANDER PARKES, of Birmingham, in the County of Warwick, for an invention for—"Improvements in coating metal tubes and rods, to render them suitable for use for many ornamental purposes." *Provisional protection only.*

CLARK.
25th March 1867.

866. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in breech-loading fire-arms and cartridges."—*A communication to him from abroad by Loughlin Conroy and Tristram Dodge Vanderveer, both of New York City, in the United States of America.* *Letters Patent sealed.*

WRIGLEY.
26th March 1867.

867. THOMAS WRIGLEY, of Todmorden, in the County of Lancaster, Manager, for an invention for—"Certain improvements in furnaces or fireplaces."

Letters Patent sealed.

SEATON.
26th March 1867.

868. WILLIAM SEATON, of Glanton Villa, Sydenham Rise, in the County of Surrey, Gentleman, for an invention for—"Improvements in the permanent way of railways and in fastenings for the same."

Letters Patent sealed; no specification filed.

STOCKER.
26th March 1867.

869. ALEXANDER SOUTHWOOD STOCKER, of 69, Lamb's Conduit Street, in the County of Middlesex, for an invention for—"Improvements in the manufacture of stoppers to be applied to bottles and other receptacles." *Letters Patent sealed.*

SAXBY.
26th March 1867.

870. JOHN SAXBY, of the firm of Saxby and Farmer, of Kilburn, W., Railway Signal Engineers, for an invention for—"Mechanical contrivances and apparatus employed for locking and for actuating or setting in motion the locking and interlocking gear used or intended to be used for regulating or governing the action and movement of railway points and signals in relation to each other."

Provisional protection only.

DAVIES.
26th March 1867.

871. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved steam and vacuum gauge."—*A communication to him from abroad by Emmett Quinn, of Washington, Columbia, in the United States of America.* *Letters Patent sealed.*

HENDERSON.
26th March 1867.

872. ARTHUR CHARLES HENDERSON, of 31, Charing Cross, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the method and means to be employed in cleansing wool previous to combing or carding the same."—*A communication to him from abroad by André Jules Grand Ry and Corneil Joseph Petit, both of Pairs, in the Empire of France.* *Provisional protection only.*

HESSE. 26th March 1867.

873. JAMES HESSE, of Dundalk, Ireland, for an invention for—"Certain improvements in the method and means of securing buttons and buttonholes, hooks and eyes to wearing-apparel and other objects to which such fastenings are applied." *Letters Patent sealed.*

GREENING. 26th March 1867.

874. EDWARD OWEN GREENING, of the firm of Greening and Company, Limited, of the City of Manchester, Manufacturers of Iron and Wire Fences, for an invention for—"Improvements in iron and wire continuous fencing, and in the lapping machinery employed therein, and in the manufacture of guards and other descriptions of wire-work." *Letters Patent sealed.*

LANGIN. 26th March 1867.

875. AUGUSTE FRÉDÉRIC LANGIN, of 2, Rue Sainte Appoline, Paris (Empire of France), Doctor, for an invention for—"A new or improved safety carriage or vehicle comprising an instantaneous unyoking or releasing apparatus, a break and apparatus connected therewith." *Letters Patent sealed.*

LAKE. 26th March 1867.

876. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in screws."—*A communication to him from abroad by Valentine Fogerty, of Boston, Massachusetts, United States of America.* *Provisional protection only.*

UNSWORTH. 26th March 1867.

877. THOMAS UNSWORTH, of No. 6, Brown Street, in the City of Manchester, in the County of Lancaster, Manufacturer, for an invention for—"Improvements in 'banding' for driving the spindles of machines used for spinning, doubling and twisting cotton, wool, flax, silk and other fibrous materials." *Provisional protection only.*

TOUSSAINT. 26th March 1867.

878. JOSEPH TOUSSAINT, of Barnsbury Road, Islington, in the County of Middlesex, for an invention for—"An improved process for uniting cork or leather either separately or combined." *Provisional protection only.*

MORTON. 26th March 1867.

879. JOHN SANDERSON MORTON, of the Town and County of Northampton, Cabinet Maker, for an invention for—"Improvements in apparatus for communicating from passengers to guards in trains and for indicating from which carriage or compartment a communication has been made." *Provisional protection only.*

WYCHERLEY. 26th March 1867.

880. JOHN WYCHERLEY, of Prescot, in the County of Lancaster, Watch Maker, for an invention for—"Improvements in the mode of and machinery for manufacturing watches, part of which improvements is applicable to lathes generally where great accuracy is required." *Provisional protection only.*

RIGGS. 26th March 1867.

881. HENRY GEORGE RIGGS, of Enfield, in the County of Middlesex, Gun-lock Maker, for an invention for—"Improvements in locks for fire-arms." *Provisional protection only.*

NEWTON. 26th March 1867.

882. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the valve gear of steam-engines."—*A communication to him from abroad by William Wright, of the City and State of New York, United States of America.* *Letters Patent sealed.*

BIGELOW. 26th March 1867.

883. ERASTUS BRIGHAM BIGELOW, of Boston, United States of America, at present residing at the Langham Hotel, Portland Place, in the County of Middlesex, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HOOKHAM. 26th March 1867.

884. GEORGE HOOKHAM, of Summertown House, Summertown, in the County of Oxford, for an invention for—"Improvements in projectiles for rifles and ordnance." *Letters Patent sealed.*

MORELAND. 26th March 1867.

885. RICHARD MORELAND the younger, of 3, Old Street, St. Luke's, in the County of Middlesex, for an invention for—"Improvements in the construction of floors and rooms for buildings." *Letters Patent sealed.*

DONISTHORPE. 26th March 1867.

886. GEORGE EDMUND DONISTHORPE, of Leeds, in the County of York, Top and Noil Manufacturer, for an invention for—"Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid." *Letters Patent sealed.*

SOHN. 26th March 1867.

887. CHARLES ÉMILE SOHN, of Mark Lane, in the City of London, for an invention for—"Improvements in the construction of posts, poles and similar supports for telegraphic, agricultural or other purposes."—*A communication to him from abroad by Guillaume Lichtenfelder, of Strasburg, in the Empire of France.* *Provisional protection only.*

SHARP. WEBB. 27th March 1867.

888. HENRY SHARP, of the Bolton Iron and Steel Company, Bolton-le-Moors, in the County of Lancaster, and FRANCIS WILLIAM WEBB, of the same place, Engineer, for an invention for—"Improvements in machinery and apparatus employed in the manufacture of iron and steel by the Bessemer process." *Letters Patent sealed.*

JOMAIN. 27th March 1867.

889. JEAN MARIE JOMAIN, of 26, Rue de Malte, Paris, in the Empire of France, a Locksmith, for an invention for—"Improvements in the manufacture of iron outside Venetian blinds." *Letters Patent sealed.*

BROOMAN. 27th March 1867.

890. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in propelling vessels and in apparatus employed therein."—*A communication to him from abroad by Richard Dover Chatterton, of Cobourg, Canada, West.* *Provisional protection only.*

SHIRT. 27th March 1867.

891. EDWIN WILKINSON SHIRT, of the Tinsley Iron and Steel Works, Rotherham, in the County of York, for an invention for—"Improvements in the manufacture of plane irons and other edge tools." *Letters Patent sealed.*

POSTLETHWAITE. 27th March 1867.

892. GEORGE RICHARD POSTLETHWAITE, of the firm of Griffiths, Son and Postlethwaite, of Harborne, in the County of Stafford, Manufacturers, for an invention for—"Improvements in machinery used in the manufacture of screw nuts and washers." *Letters Patent sealed.*

HOWSON. 27th March 1867.

893. RICHARD HOWSON, of Middlesbrough-on-Tees, in the County of York, Engineer, for an invention for—"Improvements in hot-air stoves for blast furnaces." *Provisional protection only.*

FASSMANN. 27th March 1867.

894. HENRY FASSMANN, of New Orleans, Louisiana, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"An improved machine for painting metallic surfaces, more especially designed for painting bands or hoops." *Provisional protection only.*

LAURENT. 27th March 1867.

895. JEAN MARIE LAURENT, of the City of Lyons, in the French Empire, Manufacturer, for an invention for—"Improvements in setting razors and in the strops for that purpose." *Letters Patent sealed.*

FINDLAY. 27th March 1867.

896. ALEXANDER FINDLAY, of Glasgow, in the County of Lanark, North Britain, Musical Instrument Maker, for an invention for—"Improvements in harmoniums, organs and similar musical instruments." *Provisional protection only.*

BRUCKSHAW. CORNES. 27th March 1867.

897. JOHN BRUCKSHAW, Engineer, of Oakley Mills, Staffordshire, and CORNELIUS CORNES, Engineer, of 8, Emerson Street, Southwark, Surrey, for an invention for—"A new method of reversing the motion of steam or other motive-power engines." *Provisional protection only.*

WORSSAM. 27th March 1867.

898. SAMUEL WILLIAM WORSSAM, of King's Road, Chelsea, in the County of Middlesex, Engineer, for an invention for—"Improved machinery for cutting wood." *Provisional protection only.*

TURNER. NEWTON. 27th March 1867.

899. ARCHIBALD TURNER, of Leicester, in the County of Leicester, Elastic Web Manufacturer, and WILLIAM EDWARD NEWTON, of 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery for the manufacture of carpets, coachlace and other terry or cut-pile fabrics." *Letters Patent sealed.*

FOINQUINOS. 27th March 1867.

900. LEON FOINQUINOS, of Liverpool, in the County of Lancaster, Printer, for an invention for—"Improvements in envelopes." *Provisional protection only.*

WERNDL. 27th March 1867.

901. JOSEF WERNDL, of Steyr, in the Austrian Empire, Manufacturer, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

MACKENZIE. ROBINSON. 28th March 1867.

902. ANGUS MACKENZIE, of 106, Capel Street, in the City of Dublin, Plumber, and SAMUEL ROBINSON, of 52, Brunswick Street, in the City of Dublin aforesaid, Foreman Builder, for an invention for—"Improvements in apparatus to be applied to cisterns for preventing waste of water." *Provisional protection only.*

DAWSON. DAVIES. 28th March 1867.

903. WILLIAM RICHARD DAWSON, of High House, Homerton, Gentleman, and JOHN BAILEY DAVIES, of 2, Lamb's Conduit Place, Gentleman, both in the County of Middlesex, for an invention for—Improvements in covering and protecting ships, forts and buildings." *Provisional protection only.*

NATION. 28th March 1867.

904. WILLIAM BRYER NATION, of No. 394, Old Kent Road, in the County of Surrey, for an invention for—"Improvements in engines worked by steam, water and other fluids and gases under pressure." *Provisional protection only.*

ARNOLD. DANIEL. 28th March 1867.

905. JOHN ARNOLD, of Campbell Road, Bow, and GEORGE DANIEL, of Stepney, both in the County of Middlesex, for an invention for—"Improved means of communication between a railway station and the guard or other person in charge of a train at a distance, or between the guards of two trains on the same line." *Provisional protection only.*

GRUNDY. 28th March 1867.

906. JOHN GRUNDY, of Wolstenholme Hall, in the County of Lancaster, for an invention for—"Certain improvements in fire bars to be employed in furnaces." *Letters Patent sealed.*

CRIGHTON. 28th March 1867.

907. WILLIAM CRIGHTON, of Manchester, in the County of Lancaster, Machinist and Engineer, for an invention for—"Certain improvements in machinery or apparatus to be employed in the preparation of cotton, wool and other similar fibrous materials." *Letters Patent sealed.*

ABEL. 28th March 1867.

908. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"A new or improved optical telegraph."—*A communication to him from abroad by Alexandre Schpakofsky, of St. Petersburg, Russia, Captain in the Russian Service.* *Provisional protection only.*

ROPER. 28th March 1867.

909. THOMAS ROPER, of Ulverston, in the County of Lancaster, Iron Master, for an invention for—"Improvements in the manufacture of iron and steel, and in furnaces and apparatus to be used in the said manufacture." *Provisional protection only.*

TAYLOR. LODGE. 28th March 1867.

910. FREDERICK NELSON TAYLOR, and JOAH LODGE, both of Huddersfield, in the County of York, Manufacturers, for an invention for—"Improvements in machinery or apparatus for doubling or twisting yarns." *Provisional protection only.*

FOSTER. COOKE. 28th March 1867.

911. DAVID FOSTER, and RUPERT COOKE, both of Sheffield, in the County of York, Engineers, for an invention for—"Improvements in the casting of Bessemer or crucible steel hoops for the tyres of railway wheels, such improvements being applicable for casting cylindrical forms in Bessemer or crucible steel for other purposes." *Letters Patent sealed.*

CLARK. 28th March 1867.

912. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in saddle stirrups."—*A communication to him from abroad by Osborne Macdaniel, of the City, County and State of New York, United States of America.* *Provisional protection only.*

CLARK. 28th March 1867.

913. WILLIAM CLARK, of 53, Chancery Lane, in the county of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Joseph Auguste César Brun, Gun Maker, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

WOOD. 28th March 1867.

914. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in engines and machines for washing, beating, grinding or reducing rags and other fibrous substances into paper pulp, and into fibres for yarns or cloth." *Letters Patent sealed.*

BOULTON. 28th March 1867.

915. MATTHEW PIERS WATT BOULTON, of Tew Park, Oxfordshire, Esquire, for an invention for—"Improvements in apparatus for receiving motion or energy from fluids and for imparting it to them, and in the propulsion of vessels and apparatus to be used for that purpose." *Letters Patent sealed.*

THOMPSON. 28th March 1867.

916. NATHAN THOMPSON, of Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in the construction of bottles and other vessels, and in apparatus for closing the same." *Letters Patent sealed.*

BUCHHOLZ. 28th March 1867.

917. GUSTAV ADOLPH BUCHHOLZ, of Shepherd's Bush, in the County of Middlesex, Gentleman, for an invention for—"Improved apparatus for manufacturing and assorting semolina, and reducing the same to flour." *Letters Patent sealed.*

HOWARD. BOUSFIELD. 28th March 1867.

918. JAMES HOWARD, Agricultural Engineer, and EDWARD TENNEY BOUSFIELD, Engineer, both of Bedford, in the County of Bedford, for an invention for—"Improvements in machinery for cutting and spreading grasses." *Letters Patent sealed.*

LAKE. 28th March 1867.

919. WILLIAM ROBERT LAKE, of the International Patent Office, No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved apparatus for concentrating the extracts of bark for tanning and other purposes."—*A communication to him from abroad by Benjamin Irving, of New York, United States of America.*

Provisional protection only.

LAKE. 28th March 1867.

920. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of and machinery for obtaining the extracts of bark for tanning and other purposes."—*A communication to him from abroad by Benjamin Irving, of New York, United States of America.*

Provisional protection only.

JOHNSON. 29th March 1867.

921. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in decanting or drawing off wines, beer, spirits and other liquids, and in the apparatus employed therein."—*A communication to him from abroad by Jean Gaudin, of Paris, in the Empire of France.* *Provisional protection only.*

AYDON. FIELD. 29th March 1867.

922. ENOCH HARRISON AYDON, of Wandsworth, in the County of Surrey, Civil Engineer, and EDWARD FIELD, of Chandos Chambers, Adelphi, in the City of Westminster, Consulting Engineer, for an invention for—"Improvements in the smelting and treatment of iron and other ores, in the fuel and other materials made use of in such treatment, and in apparatus for supplying the same to blast, puddling, and any other furnaces and fires in or by which great heat is required to be generated, parts of which improvements are applicable also to other purposes." *Letters Patent sealed.*

TONGUE. 29th March 1867.

923. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in lace, warp, knitting or other similar machinery for the manufacture of looped and fast-knotted fabrics, part of such machinery being applicable to sewing, stitching or quilting purposes."—*A communication to him from abroad by Charles Keenan and John Keenan, Lace Manufacturers, and William Birks, senior, and William Birks, junior, Machinists, all of Puteaux (Seine), in the Empire of France.* *Letters Patent sealed.*

SHAW. 29th March 1867.

924. PHILANDER SHAW, of Boston, in the County of Suffolk and State of Massachusetts, one of the United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"An improved air engine so arranged that it may be driven exclusively by the expansion of air, or the heated air may pass through a steam generator and the steam so generated be used in addition to the expanded air, to enhance the pressure upon the piston and thus add to the power of the engine." *Letters Patent sealed.*

BARNES. 29th March 1867.

925. KENYON BARNES, of Clowes, near Rawtenstall, in the County of Lancaster, for an invention for—"Improvements in heating water for feeding the boilers of condensing steam-engines." *Provisional protection only.*

SIMPSON. 29th March 1867.

926. JOHN ANDERSON SIMPSON, of Liverpool, in the County of Lancaster, Hat Manufacturer, for an invention for—"Improvements in the construction of umbrellas and parasols." *Letters Patent sealed.*

EASTERBROOK. 29th March 1867.

927. WALTER EASTERBROOK, of Kilburn, in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery or apparatus for actuating and controlling railway points and signals." *Letters Patent sealed.*

CANTON. 29th March 1867.

928. EUGÉNE CANTON, of La Rochelle, in the Empire of France, for an invention for—"A counting and controlling cock for liquids." *Provisional protection only.*

HENRY. 29th March 1867.

929. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in wind musical instruments."—*A communication to him from abroad by Jules Legendre, of 33, Boulevart St. Martin, Paris, France.*

Letters Patent sealed.

BARFF.
KIDD.
29th March 1867.

930. ARTHUR BARFF, of the Junior Atheneum Club, Gentleman, and JOSHUA KIDD, of 6, Great Newport Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in utilizing the heating properties of petroleum and other liquid hydrocarbons and oils, and in apparatus employed therefor."
Letters Patent sealed.

HILLIARD.
29th March 1867.

931. WILLIAM BUXTON HILLIARD, of Glasgow, in the County of Lanark, North Britain, Cutler and Surgical Instrument Maker, for an invention for—"Improvements in skates." *Letters Patent sealed; specification filed by order.*

DAVIES.
29th March 1867.

932. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the decoration or ornamentation of metals."—*A communication to him from abroad by Charles Besançon, of Paris, Gilder.* *Provisional protection only.*

CLARK.
29th March 1867.

933. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of manure and in apparatus for the same."—*A communication to him from abroad by Jean Georges Lucien Renard, Manufacturer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

WOOD.
29th March 1867.

934. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the preparation of fibre from rags or other semi-waste substances wholly or partly of wool or animal fibre, for the manufacture of yarns." *Provisional protection only.*

BIRD.
BIRD.
29th March 1867.

935. JAMES BIRD, of 6, Seymour Street West, Connaught Square, in the County of Middlesex, and JAMES BIRD, of 2, Laurence Pountney Hill, in the City of London, for an invention for—"Improvements in the manufacture of artificial fuel."
Letters Patent sealed.

BALL.
29th March 1867.

936. EDWIN WILLIAM BALL, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in gas fireplaces and gas stoves and in apparatus for heating conservatories and other rooms." *Letters Patent sealed.*

WOLVERSON.
29th March 1867.

937. JOSEPH WOLVERSON the younger, of Birmingham, in the County of Warwick, Lock Maker, for an invention for—"Improvements in locks and keys."
Letters Patent sealed.

BYWATER.
29th March 1867.

938. WILLIAM BYWATER, of the Sweet Street Foundry, Holbeck, near Leeds, in the County of York, for an invention for—"Improvements in apparatus for effecting the drawing, spinning, twisting and laying of hemp, flax, tow, worsted, wool, silk, cotton, china grass or other fibrous material, for the manufacture of yarn, thread, twine, cord or rope, which improvements are also applicable to the manufacture of cord or rope from iron or other metal wire." *Letters Patent sealed.*

GADD.
BAILLON.
29th March 1867.

939. WILLIAM GADD, Consulting Engineer, of 122, Portland Road, Nottingham, and LOUIS BAILLON, Lace Manufacturer, of St. Mary's Gate, Nottingham, for an invention for—"Improvements in the manufacture of boot elastic web and other fabrics." *Letters Patent sealed.*

FARMER.
BALMFORTH.
29th March 1867.

940. BENJAMIN FARMER, and THOMAS BALMFORTH, of Barrow-in-Furness, in the County of Lancaster, for an invention for—"Improvements in the manufacture of steel bells and in mounting the same." *Provisional protection only.*

CANHAM.
KREUT.
30th March 1867.

941. RICHARD CANHAM, of Clerkenwell, in the County of Middlesex, and FREDERICK WILLIAM KREUT, of Guildford Street, Farringdon Road, also in the County of Middlesex, for an invention for—"Improvements in means or apparatus employed in the cure of smokey chimneys, and in ventilating buildings and other places."
Letters Patent sealed.

WARD.
30th March 1867.

942. JOSEPH EDWIN WARD, of Bredbury, in the County of Chester, Hat Manufacturer, for an invention for—"Improvements in machinery for the manufacture of hats or coverings for the head." *Letters Patent sealed.*

JONES.
30th March 1867.

943. EDWARD STEWART JONES, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"An improved mode of and apparatus for rowing boats on water." *Letters Patent sealed.*

PRIDEAUX. 30th March 1867.

944. THOMAS PRIDEAUX, of Sheffield, in the County of York, for an invention for—"Improvements in blast furnaces or cupolas." *Provisional protection only.*

MACNEE. 30th March 1867.

945. JAMES MACNEE, of Edinburgh, in the County of Mid Lothian, North Britain, Carriage Builder, for an invention for—"Improvements in movable hoods for carriages and other vehicles." *Provisional protection only.*

GROVER. 30th March 1867.

946. SAMUEL MONTAGUE GROVER, of Worsley, in the County of Lancaster Cotton Spinner, for an invention for—"Improvements in machinery or apparatus to be employed in doubling or twisting cotton, wool or other fibrous substances." *Letters Patent sealed.*

WOODBURY. ASHTON. 30th March 1867.

947. WALTER BENTLEY WOODBURY, of Rusholme, in the County of Lancaster, and ROBERT HOWE ASHTON, of Ashton-upon-Mersey, in the County of Chester, for an invention for—"Improved means of producing designs upon paper." *Letters Patent sealed.*

COLLYER. 30th March 1867.

948. ROBERT HANHAM COLLYER, of Seafield Works, Dundee, North Britain, M.D., for an invention for—"Improvements in the treatment of flax, hemp, jute, china grass and other fibrous materials." *Provisional protection only.*

FLEMING. 30th March 1867.

949. JOHN FLEMING, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in bending and circling metallic plates, and in machinery or apparatus employed therefor." *Provisional protection only.*

LILLEY. 30th March 1867.

950. SIMEON LILLEY, of Birmingham, in the County of Warwick, Fog Signal Manufacturer, for an invention for—"Improvements in the manufacture and construction of fog or alarm signals for use on railways, and in apparatus for placing such signals on the rail." *Letters Patent sealed and specification filed by order.*

McCOMB. 30th March 1867.

951. JAMES JENNINGS McCOMB, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"An improved mode of coupling telegraph and other wires."—*A communication to him from abroad by David McComb, of Memphis, in the State of Tennessee, United States of America (since deceased).* *Letters Patent sealed.*

NEWTON. 30th March 1867.

952. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved process for manufacturing ice and for other refrigerating purposes."—*A communication to him from abroad by Thaddeus Sobeski Carlincourt Lowe, of the City and State of New York, United States of America.* *Provisional protection only.*

NEWTON. 30th March 1867.

953. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved hydraulic engine for obtaining motive-power."—*A communication to him from abroad by Charles Faivre, senior, of Rue St. Sebastien, Paris, in the Empire of France.* *Provisional protection only.*

CLARK. 30th March 1867.

954. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for the manufacture of bricks, tiles and other articles of plastic material."—*A communication to him from abroad by Frederick Hertel, Machinist, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

HIGGINSON. 30th March 1867.

955. GEORGE HIGGINSON, of Preston, in the County of Lancaster, Artist, for an invention for—"Improvements in producing opalline pictures into china, glass, porcelain or any other enamelled surface." *Provisional protection only.*

BONNEVILLE. 30th March 1867.

956. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"An improved mode of hanging ships' rudders."—*A communication from Henry Harris Pember and Uriah Furman Rogers, two persons resident at New York City, in the United States of America.* *Letters Patent sealed.*

BONNEVILLE. 30th March 1867.

957. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"An improved fid."—*A communication from Henry Harris Pember and Uriah Furman Rogers, two persons resident at New York City, in the United States of America.* *Provisional protection NOT granted.*

BONNEVILLE. 30th March 1867.

958. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"An improved mode of making brooms."—*A communication from Eli P. Cooley, a person resident at New York City, in the United States of America.*

Letters Patent sealed.

RANDALL. ADAMS. 30th March 1867.

959. JAMES RANDALL, and CHARLES ADAMS, both of Kilburn, in the County of Middlesex, for an invention for—"Improvements in machinery or apparatus for actuating fog or detonating signals on railways." *Provisional protection only.*

HAHN. 30th March 1867.

960. FRIEDRICH HAHN, of Tavistock Street, Bedford Square, in the County of Middlesex, for an invention for—"Improvements in the manufacture of gunpowder." *Provisional protection only.*

HAHN. 30th March 1867.

961. FRIEDRICH HAHN, of Tavistock Street, Bedford Square, in the County of Middlesex, for an invention for—"Improvements in breech-loading needle guns and in cartridges to be used therewith." *Provisional protection only.*

MANCEAUX. 30th March 1867.

962. FRANÇOIS JULES MANCEAUX, of Paris, in the Empire of France, Gun Manufacturer, for an invention for—"Improvements in fire-arms and in apparatus for charging the same." *Letters Patent sealed.*

WHITWORTH. 30th March 1867.

963. JOSEPH WHITWORTH, of Manchester, for an invention for—"Improvements in breech-loading fire-arms and cartridges."

Letters Patent sealed; no specification filed.

JONES. 30th March 1867.

964. JAMES GRAFTON JONES, of the Blaina Ironworks, near Newport, in the County of Monmouth, for an invention for—"Improvements in machinery employed in getting coal and other minerals, and in rail or tramways to be used therewith."

Letters Patent sealed.

ABEL. 1st April 1867.

965. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in compositions for treating fluids employed for illuminating purposes."—*A communication to him from abroad by Hiram Baker Wellman, of Indianapolis, Indiana, United States of America.* *Provisional protection only.*

LAKE. 1st April 1867.

966. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the county of Middlesex, Consulting Engineer, for an invention for—"An improved mode of and means for closing and fastening the port lights of ships and other vessels."—*A communication to him from abroad by Edward Seymour Hidden, of the City, County and State of New York, United States of America.* *Provisional protection only.*

HARKER. 1st April 1867.

967. JOHN HARKER, of Great Driffield, in the County of York, Engineer of the Driffield and East Riding Pure Linseed Cake Company, Limited, for an invention for—"Improvements in apparatus for expressing oils and fatty matters, and for forming and marking the cake produced in the manufacture."

Letters Patent sealed.

BROOMAN. 1st April 1867.

968. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improved means of producing surfaces in relief or in intaglio for printing and other purposes."—*A communication to him from abroad by André Adolphe Disderi, of Paris, France.* *Provisional protection only.*

PRENTICE. 1st April 1867.

969. JOHN PRENTICE, of the City and State of New York, United States of America, for an invention for—"Improvements in machinery for making cigars."

Letters Patent sealed.

NEWTON. 1st April 1867.

970. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in sewing machinery."—*A communication to him from abroad by James Alford House and Henry Alonzo House, both of Brooklyn, in the State of New York, United States of America.* *Letters Patent sealed.*

CURTIS. 1st April 1867.

971. FRANCIS CURTIS, of Newton, in the County of Middlesex and State of Massachusetts, United States of America, for an invention for—"Certain new and useful improvements in paper machinery."

Complete specification; Letters Patent sealed.

LEWIS. CLARK. 1st April 1867.

972. JOSEPH LEWIS, of No. 51, High Street, Bloomsbury, Engineer, and GEORGE CLARK, Gentleman, of No. 29, Arundel Street, Strand, both in the County of Middlesex, for an invention for—"Improvements in fire-arms and cartridges."
Letters Patent sealed.

BONNEVILLE. 2nd April 1867.

973. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for —"An improved means of economising motive-power."—*A communication from Antoine Courme, a person resident at Vence, in the Department of the Alpes-Maritimes, Empire of France aforesaid, Manufacturer.*
Provisional protection only.

BONNEVILLE. 2nd April 1867.

974. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved means of readily igniting fuel and lighting fires."—*A communication from Arsène de Pillon de St. Paul, a person resident at Saint Germain-en-Laye, in the Empire of France aforesaid, Gentleman.* *Letters Patent sealed.*

BONNEVILLE. 2nd April 1867.

975. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved railway brake."—*A communication from Eugène Hippolyte Duru, a person resident at No. 72, Boulevart Sébastopol, in Paris aforesaid.*
Complete specification; Letters Patent sealed.

WOLSTENHOLME. 2nd April 1867.

976. ROBERT WOLSTENHOLME, of Oldham, in the County of Lancaster, Manager, for an invention for—"Certain improvements in the manufacture of textile fabrics called 'imperials,' 'velvets,' 'velveteens,' 'satteens' and 'drills,' which improvements are also applicable for the manufacture of fabrics such as 'doe-skins,' tweeds and other fancy woollen cloths." *Provisional protection only.*

MEYER. MEYER. 2nd April 1867.

977. JEAN JACQUES MEYER, and ADOLPHE MEYER, junior, of Mulhouse, now of No. 113, Avenue de Neuilly, Paris, in the Empire of France, Civil Engineers, for an invention for—"An improved system of tank locomotive engine."
Letters Patent sealed.

LAKE. 2nd April 1867.

978. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved apparatus for manufacturing boxes from sheets of paper, metal and other material."—*A communication to him from abroad by Bryant Clarke, of the City, County and State of New York, United States of America.* *Provisional protection only.*

STOREY. BICKERDIKE. WILSON. 2nd April 1867.

979. JOSEPH STOREY, and WILLIAM EDWARD BICKERDIKE, both of the Town and County of Lancaster, Chemical Manufacturers, and WILLIAM VIRGO WILSON, of Jubilee Street, Mile End, in the County of Middlesex, for an invention for —"A new method of bronzing metallic and other surfaces."
Provisional protection only.

NEWTON. 2nd April 1867.

980. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in centrifugal sugar machines."—*A communication to him from abroad by Alexander Mackey, of the City of New York, and Eberhard Müller, of Williamsburg, both in the State of New York, United States of America.* *Provisional protection only.*

ROBINSON. 2nd April 1867.

981. THOMAS BLIZARD ROBINSON, of Islington, in the County of Middlesex, Merchant's Clerk, for an invention for —"Improvements in the manufacture of artificial flowers and foliage." *Provisional protection only.*

SHANKS. 2nd April 1867.

982. JAMES SHANKS, of Arbroath, in the County of Forfar, North Britain, for an invention for—"Improvements in cutting the hair off horses or other animals, and in the machinery or apparatus employed therefor." *Provisional protection only.*

MAHLER. 2nd April 1867.

983. JOST MAHLER, of No. 471, Obergrund, Lucerne, in the Canton of Lucerne, Switzerland, for an invention for—"Improvements in coverings for internal walls and surfaces." *Letters Patent sealed.*

MOLL. 2nd April 1867.

984. JEAN ALBERT MOLL, of Moutier Grandval, Bern, Switzerland, Engineer, for an invention for—"Improvements in machinery or apparatus for obtaining and applying motive-power." *Letters Patent sealed.*

CLARK. 2nd April 1867.

985. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in bathing apparatus applicable principally for horses."—*A communication to him from abroad by The Chevalier Achille Angelini, Major General and Aide de Camp to his Majesty the King of Italy, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

CLARK. 2nd April 1867.

986. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in means and apparatus for reproducing or copying letters and manuscripts."—*A communication to him from abroad by Pierre Alexandre Georges Niepce de St. Victor, Gentleman, and Manuel Leopold Jonas Lavater, India-rubber Manufacturer, both of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

CLARK. 2nd April 1867.

987. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in looms for weaving figured fabrics."—*A communication to him from abroad by Jean Baptiste Augustin Payen-Baudouin, Manufacturer, of 29, Boulevart St Martin, Paris.* *Provisional protection only.*

CLARK. 2nd April 1867.

988. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in applying and fitting the tubes of multitubular boilers, condensers and other like capacities, and in apparatus for the same."—*A communication to him from abroad by Victor Langlois, Chief Naval Constructor at Cherbourg, and of 29, Boulevart St. Martin, Paris, both in the Empire of France.* *Letters Patent sealed.*

REEVES. 2nd April 1867.

989. JOHN FRY REEVES, of 5, Cambridge Terrace, Notting Hill, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the preparation of explosive compounds and in making up cartridges or charges therewith." *Provisional protection only.*

PICKERING. 3rd April 1867.

990. JONATHAN PICKERING, of Stockton-on-Tees, in the County of Durham, for an invention for—"Improvements in apparatus for raising weights and other appliances." *Letters Patent sealed.*

WHITEHURST. WALSH. 3rd April 1867.

991. JAMES WHITEHURST, of Manchester, in the County of Lancaster, Mechanic, and THOMAS WALSH, of Salford, in the same County, Overlooker, for an invention for —"Improvements in looms for weaving." *Letters Patent sealed.*

WALDENSTRÖM. 3rd April 1867.

992. ERIC HUGO WALDENSTRÖM, of Manchester, in the County of Lancaster, Mechanical Engineer, for an invention for—"Certain improvements in miners' safety lamps." *Provisional protection only.*

MUSGRAVE. 3rd April 1867.

993. JAMES MUSGRAVE, of Belfast, Ireland, for an invention for—"Improvements in fittings for stables, harness rooms and cow houses." *Provisional protection only.*

HALLIDIE. 3rd April 1867.

994. ANDREW SMITH HALLIDIE, of San Francisco, California, at present residing at No. 18, Salisbury Street, Strand, London, W.C., Civil Engineer, for an invention for —"Improvements in the construction of suspension bridges." *Letters Patent sealed.*

CLARK. 3rd April 1867.

995. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in stoppers or means for stopping the ears."—*A communication to him from abroad by Joseph Porter Michaels, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

FAUCHEUX. 3rd April 1867.

996. THÉODORE FAUCHEUX, of Kentish Town, in the County of Middlesex, Engineer, for an invention for —"Improvements in boats." *Provisional protection only.*

SPENCE. 3rd April 1867.

997. PETER SPENCE, of Newton Heath, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in separating zinc from certain ores or minerals, and in recovering other substances found therewith." *Letters Patent sealed.*

BOUCK. 3rd April 1867.

998. JOHN AUGUSTUS BOUCK, of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in burning petroleum, creosote, gas tar, and other such fluid bodies capable of being used as fuel." *Letters Patent sealed; no specification filed.*

SCOTT. 3rd April 1867.

999. JOHN WILLIAM SCOTT, of the City of Worcester, Manufacturer, for an invention for—"Improvements in needles and other similar articles."
Letters Patent sealed.

VAN DERBURGH. 3rd April 1867.

1000. GEORGE EDWARD VAN DERBURGH, of the City and County of New York, in the State of New York, and United States of America, Gentleman, for an invention for —"An improved artificial stone for grinding, whetting or polishing purposes, and a process for producing the same."
Letters Patent sealed and specification filed by order.

HILLS. 3rd April 1867.

1001. ALBERT GAIUS HILLS, of Craven Street, Strand, in the County of Middlesex, for an invention for—"An improved safety-bridle for horses."
Provisional protection only

DELESSERT. 3rd April 1867.

1002. EUGÈNE DELESSERT, of King William Street, in the City of London, Merchant, for an invention for—"Improvements in cartridges for breech-loading fire-arms."—*A communication to him from abroad by Alfred Pierre Tronchon, of Paris, France.* *Provisional protection only.*

STAFFORD. MCCALLUM. 3rd April 1867.

1003. WILLIAM STAFFORD, and WILLIAM PORTER MCCALLUM, both of Blackburn, in the County of Lancaster, Engineers, for an invention for—"Improvements in apparatus employed for heating the feed water of steam-boilers."
Provisional protection only.

BARKER. 3rd April 1867.

1004. JOSEPH HENRY BARKER, of Leeds, in the County of York, Woollen Manufacturer, for an invention for—"Improvements in 'milling' machines."
Letters Patent sealed.

OGDEN. STEPHENSON. 3rd April 1867.

1005. JOHN OGDEN, of Leeds, Engineer, and JOHN STEPHENSON, of Bradford, both in the County of York, for an invention for—"Improvements in the construction of steam-boilers." *Provisional protection only.*

HODSON. 3rd April 1867.

1006. WILLIAM HODSON, of Kingston Square, in the Borough of Kingston-upon-Hull, Mechanical Engineer, for an invention for—"Improvements in machinery for the manufacture of bricks and similar moulded articles."
Provisional protection only.

LAKE. 3rd April 1867.

1007. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in revolving breech-loading fire-arms."—*A communication to him from abroad by William Herrick, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

DAVEY. 4th April 1867.

1008. HENRY DAVEY, Engineer, of 163, Strand, County of Middlesex, for an invention for—"Improvements in obtaining motive-power and utilising the products of combustion of liquid and other fuels." *Provisional protection only.*

LADLEY. 4th April 1867.

1009. JOSEPH LADLEY, of Leeds, in the County of York, Woollen Manufacturer, for an invention for—"Improvements in machinery or apparatus for spinning wool or other fibrous substances." *Letters Patent sealed.*

WEBBER. 4th April 1867.

1010. WILLIAM CHARLES WEBBER, of Midhurst, in the County of Sussex, England, but at present residing at Mentone, in the Empire of France, for an invention for—"Improvements applicable to feeding bottles, which improvements are also applicable to other useful purposes." *Letters Patent sealed.*

PILLING. HARPER. 4th April 1867.

1011. EDWIN PILLING, of Rochdale, in the County of Lancaster, Manufacturer, and JOHN HARPER, of the same place, Weaver, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

PERKINS. 4th April 1867.

1012. STANHOPE PERKINS, of Fairfield, Lancashire, for an invention for—"An improvement in the manufacture of railway crossings." *Letters Patent sealed.*

PETRIE. 4th April 1867.

1013. JOHN PETRIE, jun^{r}., of Rochdale, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in machines for washing wool and other fibrous materials." *Letters Patent sealed.*

CASPER. 4th April 1867.

1014. EDWARD CASPER, of No. 33, Poultry, in the City of London, Merchant, for an invention for—"Improvements in apparatus for extinguishing fires."—*A communication to him from abroad by François Carlier, of Boulogne-on-Seine, in the Empire of France, Doctor of Medicine.* *Provisional protection only.*

KILNER. 4th April 1867.

1015. JAMES MAZE KILNER, of No. 3, Saltney Road, Chester, Clerk, for an invention for—"Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables." *Letters Patent sealed.*

FOWLER. GREIG. 4th April 1867.

1016. BARNARD FOWLER, of 71, Cornhill, in the City of London, Merchant, and DAVID GREIG, of the Steam Plough Works, Leeds, in the County of York, Engineer, for an invention for—"Improvements in railways and railway engines." *Letters Patent sealed.*

ELLISON. 5th April 1867.

1017. DANIEL ELLISON, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

BUSS. 5th April 1867.

1018. HENRY BUSS, of 56, High St., Shoreditch, in the County of Middlesex, M.D., for an invention for—"Improvements in the construction of sea-walls, quays, jetties, piers and roadways, in the reclamation of land, in the formation of docks, reservoirs, basins and coast-harbours." *Letters Patent sealed.*

TATHAM. HEAP. 5th April 1867.

1019. WILLIAM TATHAM, and WILLIAM TWEEDALE HEAP, of Rochdale, in the County of Lancaster, Machine Makers, for an invention for—"Improvements in machinery or apparatus for teazing and opening textile or fibrous materials." *Letters Patent sealed.*

LEATHER. 5th April 1867.

1020. SAMUEL LEATHER, of Dalton, near Huddersfield, in the County of York, Manufacturer, for an invention for—"Improvements in the manufacture of certain articles of dress or wearing-apparel, such as coats, trousers, vests, jackets, mantles, shirts, drawers and similar articles, and in apparatus employed therein, which apparatus is also applicable in figure weaving." *Provisional protection only.*

TATTERS. 5th April 1867.

1021. JAMES GRAHAM TATTERS, of Plymouth, in the County of Devon, for an invention for—"An improved method of and apparatus for communicating between the several parts of railway trains." *Letters Patent sealed.*

MARSHALL. 5th April 1867.

1022. THOMAS BEAUMONT MARSHALL, of Queen Street, Cheapside, in the City of London, for an invention for—"Improvements in the insulation of subterranean electric telegraph wires and in laying the same." *Letters Patent sealed.*

GILBEE. 5th April 1867.

1023. WILLIAM ARMAND GILBEE, trading under the name or style of L. de Fontainemoreau, of the General Patent Office, 4, South Street, Finsbury, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in breech-loading fire-arms and in cartridges for the same."—*A communication to him from abroad by Jérome Flachat, of Saint Etienne, Loire, in the Empire of France.* *Provisional protection only.*

MOCQUARD. 5th April 1867.

1024. FRANÇOIS ADOLPHE MOCQUARD, of No. 32, Cours Belzunce, Marseille, in the Empire of France, Civil Engineer, for an invention for—"A new application of gas-burners." *Provisional protection only.*

BENINGFIELD. 5th April 1867.

1025. EDWARD BENINGFIELD, of Old Kent Road, in the County of Surrey, for an invention for—"An improved lifting machine applicable as a fire-escape and for repairing and decorating houses and other buildings." *Provisional protection* NOT *granted.*

MATTHEWS. 5th April 1867.

1026. STEPHEN MATTHEWS, of Chapel Row, Portsea, in the County of Hants, for an invention for—"An improved combined lift and force pump." *Provisional protection only.*

ADAIR. 5th April 1867.

1027. WILLIAM ADAIR, of Liverpool, in the County of Lancaster, for an invention for—"Improvements in pumps." *Letters Patent sealed.*

NEWTON. 5th April 1867.

1028. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in steam generators."—*A communication to him from abroad by the Mitchell Safety Steam Generator Company (Incorporated), of Albany, in the State of New York, United States of America.* *Letters Patent sealed.*

WILSON. 6th April 1867.

1029. HENRY WILSON, of Stockton-on-Tees, in the County of Durham, for an invention for—"Improvements in cocks or valves for discharging water, oil and other fluids or gases." *Provisional protection only.*

FITTON. HALL. 6th April 1867.

1030. FREDERICK ALEXANDER FITTON, of the Beehive Spindle Works, Bengal Street, in the City of Manchester, and THOMAS HALL, of Grafton Place, Ardwick, in the City of Manchester, Foreman, for an invention for—"Improvements in spindles and flyers employed in machinery for preparing and spinning cotton, flax and other fibrous substances." *Provisional protection only.*

NEILD. SMITH. YATES. 6th April 1867.

1031. ROBERT NEILD, of Leigh, in the County of Lancaster, Cotton Manufacturer, THOMAS SMITH, of the same place, Overlooker, and JOHN YATES, of the same place, Cotton Manufacturer, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

WOODS. 6th April 1867.

1032. JOSEPH WOODS, of Warrington, in the County of Lancaster, for an invention for—"An improved method of and apparatus for signalling and giving alarm on railways." *Provisional protection only.*

DENNIS. 6th April 1867.

1033. WILLIAM DENNIS, of Aldermanbury, in the City of London, Merchant, for an invention for—"Improvements in the construction of bottles intended to contain malt liquors and other liquids, and in the mode of stoppering, unstoppering and drawing off the contents thereof, the said stoppers being also applicable to bottles of the ordinary kind and other vessels employed to contain liquids, fluids and gases, either separately or in combination." *Provisional protection only.*

BUTCHART. 6th April 1867.

1034. WILLIAM PARELL BUTCHART, of Dundee, in the County of Forfar, North Britain, Mill Manager, for an invention for—"Improvements in treating and softening jute, hemp, flax and other fibrous substances, and in the machinery or apparatus connected therewith." *Letters Patent sealed.*

DES ROSEAUX. 6th April 1867.

1035. JULES DE LA COUX DES ROSEAUX, of No. 60, Boulevart de Strasbourg, Paris, in the Empire of France, Merchant, for an invention for—"An improved lubricator for oiling axles and other moving pieces of machineries." *Letters Patent sealed.*

LUCAS. 6th April 1867.

1036. THOMAS HOLDEN LUCAS, of the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in the mode or method of fastening bales of merchandize." *Letters Patent sealed.*

STUART. 6th April 1867.

1037. GRAHAM STUART, of Sheffield, in the County of York, for an invention for—"Improvements in taps and valves used for regulating or restraining the flow of water or other liquids, steam or gases." *Provisional protection only.*

CLARK. 6th April 1867.

1038. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in lamps, part of which improvements consists in the imitation of a candle and candlestick."—*A communication to him from abroad by Edmond Armand Louis D'Argy, Manufacturer, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

HUGHES. 6th April 1867.

1039. WALTER WATSON HUGHES, of 14, Queen's Gate, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for propelling vessels." *Provisional protection only.*

BROOMAN. 6th April 1867.

1040. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improved means of producing oxygen."—*A communication to him from abroad by Cyprien Marie Tessié du Motay and Charles Raphael Maréchal, both of Metz, France.* *Letters Patent sealed.*

DREW. SOUTHWELL. WHITE. 6th April 1867.

1041. JOHN DREW, of 2, Great Warner Street, Clerkenwell, in the County of Middlesex, Military Barrack Furniture Maker, EDWARD SOUTHWELL, of 33, Regent Street, in the same County, and HENRY WHITE, of Covent Garden, also in the same County, for an invention for—"Improvements in travelling bags." *Letters Patent sealed.*

HENDERSON. 6th April 1867.

1042. WILLIAM HENDERSON, of the City of Glasgow, Chemist, for an invention for—"Improvements in oxidizing minerals, ores and metals, in reducing oxides of metals, in separating certain metals from each other, in kilns, furnaces or other apparatus for these purposes, and in the treatment of the products obtained therefrom." *Letters Patent sealed.*

BARKER. 6th April 1867.

1043. JAMES BARKER, of Ratcliff Cross, in the County of Middlesex, Engineer, for an invention for—"Improvements in spring centres for doors and other purposes." *Letters Patent sealed.*

LAKE.
6th April 1867.

1044. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of embalming or preserving dead bodies and carcasses."—*A communication to him from abroad by George Washington Scollay, of St. Louis, Missouri, United States of America.* *Letters Patent sealed.*

LAKE.
6th April 1867.

1045. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved combined water-meter and force-pump."—*A communication to him from abroad by Elihu Spencer and Thomas Stephens, both of New York, United States of America.* *Letters Patent sealed.*

BONNEVILLE.
8th April 1867.

1046. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved kind of soap."—*A communication from Emeric de Werchin, a person resident at No. 15, Rue d'Antin, in the City of Paris aforesaid, Manufacturer.* *Complete specification; Letters Patent sealed.*

JAMES.
8th April 1867.

1047. GEORGE FREDERICK JAMES, of Salford, in the County of Lancaster, for an invention for—"Certain improvements in apparatus for covering woollen or fibrous yarns with an outer thread or yarn." *Letters Patent sealed.*

HENLEY.
8th April 1867.

1048. WILLIAM THOMAS HENLEY, of Saint John Street Road, in the County of Middlesex, Telegraphic Engineer, for an invention for—"Improvements in posts or supports particularly applicable to posts or supports for telegraph wires." *Letters Patent sealed.*

HENLEY.
8th April 1867.

1049. WILLIAM THOMAS HENLEY, of Saint John Street Road, in the County of Middlesex, Telegraphic Engineer, for an invention for—"Improvements in machinery for the manufacture and treatment of wire." *Letters Patent sealed.*

NEWTON.
8th April 1867.

1050. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement applicable to shells and other hollow projectiles."—*A communication to him from abroad by William Sully Beebe, of Philadelphia, in the State of Pennsylvania, United States of America.* *Letters Patent sealed.*

CLARK.
8th April 1867.

1051. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally."—*A communication to him from abroad by John Kinney Mayo, of New York City, in the United States of America.* *Letters Patent sealed.*

BROOMAN.
8th April 1867.

1052. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in jacquard machinery."—*A communication to him from abroad by Jean Pierre Lachaud and Henri Simon Roussel, both of Paris, France.* *Letters Patent sealed.*

LITTLE.
8th April 1867.

1053. GEORGE LITTLE, of the City, County and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus for regulating and transmitting electric currents, more especially designed for use in connection with telegraphic recording instruments for long submarine lines." *Letters Patent sealed.*

CLAUS.
8th April 1867.

1054. CARL FRIEDRICH CLAUS, of Middlesbrough-on-Tees, in the County of York, Chemist, for an invention for—"Improvements in the manufacture of chlorine." *Letters Patent sealed.*

FLEETWOOD.
9th April 1867.

1055. DANIEL JOSEPH FLEETWOOD, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures." *Letters Patent sealed.*

ROONEY.
9th April 1867.

1056. ROBERT ALEXANDER ROONEY, of Browneville, Galway, Ireland, for an invention for—"Improvements in the construction of railways and trucks to be employed thereon, specially for agricultural purposes." *Provisional protection only.*

WILSON.
9th April 1867.

1057. WILLIAM NEWTON WILSON, of 144, Cheapside, in the City of London, and 144, High Holborn, in the County of Middlesex, Sewing-Machine Manufacturer, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

DAVIES.
9th April 1867.

1058. JOHN LACEY DAVIES, of the firm of John Davies and Son, of 4, St. Ann's Square, Manchester, in the County of Lancaster, Patent Agents, for an invention for—"Certain improvements in the method of purifying smoke and in apparatus connected therewith."—*A communication to him from abroad by Wolf Maurice, of Faubourg Poissonière, Paris, in the Empire of France.* *Letters Patent sealed.*

FORBES.
9th April 1867.

1059. HUGH FORBES, of 184, Euston Road, N.W., Parish of St. Pancras, County of Middlesex, for an invention for—"Improvements in machinery or apparatus for maintaining and augmenting motive-power." *Letters Patent sealed.*

MOREL.
9th April 1867.

1060. AUGUSTIN MOREL, of the Town of Roubaix, in the Department of the Nord, in the Empire of France, Manufacturer, for an invention for—"Improvements in winding up thread and other filaceous fabrics." *Letters Patent sealed.*

REDMAYNE.
SIBREY.
9th April 1867.

1061. THOMAS REDMAYNE, of Kilnhurst, Rotherham, in the County of York, and JOHN SIBREY, of the same place, Stove Grate Manufacturers, for an invention for—"Improvements in the construction of register or other open fire-grates." *Letters Patent sealed.*

WALLER.
9th April 1867.

1062. FRANCIS WALLER, of Skipton, in the County of York, Whitesmith, for an invention for—"An improved spring for doors and other purposes." *Letters Patent sealed.*

RATCLIFFE.
WOLSTENCROFT.
10th April 1867.

1063. JOHN RATCLIFFE, Overlooker, and GEORGE WOLSTENCROFT, Sub-Manager, both of Farnworth, near Bolton, in the County of Lancaster, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

PLAYER.
10th April 1867.

1064. JACOB HORT PLAYER, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of phosphorus, and in economizing residual products of the said manufacture." *Letters Patent sealed.*

LOVE.
DAVY.
METCALF.
10th April 1867.

1065. FRANCIS LOVE, THOMAS DAVY, and JOHN METCALF, all of Stanningley, near Leeds, in the County of York, for an invention for—"An improved pressing iron and appliance thereto for the use of tailors, hatters, laundresses, and also for domestic use." *Provisional protection only.*

NAPIER.
RANKINE.
10th April 1867.

1066. JAMES ROBERT NAPIER, Marine Engineer, and WILLIAM JOHN MACQUORN RANKINE, Civil Engineer, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in valve seats." *Letters Patent sealed.*

JOHNSON.
10th April 1867.

1067. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in hammers."—*A communication to him from abroad by George Selsor and William Cook, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

NEWTON.
10th April 1867.

1068. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved machinery for picking and ginning cotton."—*A communication to him from abroad by Enoch Osgood, of Boston, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

LAKE.
10th April 1867.

1069. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Henry Huntington Wolcott, of Yonkers, New York, United States of America.* *Letters Patent sealed.*

CAMBRIDGE.
10th April 1867.

1070. WILLIAM COLBORNE CAMBRIDGE, of the City of Bristol, Engineer, for an invention for—"Improvements in fire-bars, and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes." *Letters Patent sealed.*

FLEURY.
11th April 1867.

1071. FRANCIS GEORGE FLEURY, of Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in machinery or apparatus for measuring fluids." *Letters Patent sealed.*

KIRK. 11th April 1867. — 1072. ALEXANDER CARNEGIE KIRK, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in blowing engines." *Letters Patent sealed.*

DAY. 11th April 1867. — 1073. ROBERT DAY, of 44, Hindon Street, Pimlico, in the County of Middlesex, Carpenter and Joiner, for an invention for—"A new or improved painter's easel." *Letters Patent sealed and specification filed by order.*

COUCHMAN. 11th April 1867. — 1074. RICHARD COUCHMAN, of Noble Street, Saint Martin's-le-Grand, in the City of London, for an invention for—"Improvements in buckles or similar fastenings for braces, belts, straps or bands." *Provisional protection only.*

SMITH. 11th April 1867. — 1075. SAMUEL SMITH, of Princes Street, Leicester Square, in the County of Middlesex, Gun Manufacturer, for an invention for—"Improvements in breech-loading sporting guns." *Letters Patent sealed.*

BARLOW. EDMESTON. 11th April 1867. — 1076. SAMUEL BARLOW, of Stakehill, in the County of Lancaster, and THOMAS EDMESTON, of the same place, for an invention for—"Improvements in furnaces of steam and other boilers." *Letters Patent sealed.*

LAKE. 11th April 1867. — 1077. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of and apparatus for multiplying power, more especially applicable to hoisting or lifting machinery."—*A communication to him from abroad by Henry Josiah Griswold, of Boston, Massachusetts, United States of America.* *Provisional protection only.*

LAKE. 11th April 1867. — 1078. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in machinery for manufacturing bricks."—*A communication to him from abroad by Richard Alexander Douglas, of Chicago, Illinois, United States of America.* *Complete specification; Letters Patent sealed.*

HIGGINS. WHITWORTH. 11th April 1867. — 1079. JAMES HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvements in machinery for preparing and spinning cotton and other fibrous materials." *Letters Patent sealed.*

CLARK. 11th April 1867. — 1080. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in vermin traps."—*A communication to him from abroad by Henri Ferdinand Serrin, Trap Maker, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

SLATER. 11th April 1867. — 1081. GEORGE SLATER, of No. 130, St. John's Road, Hoxton, in the County of Middlesex, Engineer, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

ROCHUSSEN. 11th April 1867. — 1082. THEODORE ANTHONY ROCHUSSEN, of Abchurch Lane, in the City of London, for an invention for—"Improvements in the armour plating and sheathing of ships of war and fortifications." *Provisional protection only.*

SNOW. 11th April 1867. — 1083. JOSIAH JOHN SNOW, of 70, Wilstead Street, Euston Road, in the County of Middlesex, for an invention for—"Improvements in the construction of locomotive figures and automata." *Provisional protection only.*

DUNBAR. 11th April 1867. — 1084. JAMES DUNBAR, of Westminster Chambers, Victoria Street, in the City of Westminster, Engineer, for an invention for—"Improvements in apparatus for exhibiting advertisements." *Provisional protection only.*

COURTENAY. 11th April 1867. — 1085. REGINALD COURTENAY, Bishop of Kingston, Jamaica, now resident at 19, Somerset Street, Portman Square, in the County of Middlesex, for an invention for—"Improvements in apparatus for propelling vessels." *Provisional protection only.*

BONNEVILLE. 12th April 1867. — 1086. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in metallic railway sleepers and in the means of fixing the rails on to the same."—*A communication from Achille Legrand, a person resident at Mons, in the Kingdom of Belgium, Manufacturer.* *Provisional protection only.*

DAWES. 12th April 1867. — 1087. WILLIAM HENRY DAWES, of Bromford Iron Works, West Bromwich, in the County of Stafford, Iron Master, for an invention for—"An improvement or improvements in the manufacture of iron." *Provisional protection only.*

ROBERTSON. ORCHAR. 12th April 1867.

1088. WILLIAM ROBERTSON, and JAMES GUTHRIE ORCHAR, both of Dundee, in the County of Forfar, North Britain, for an invention for—"Improvements in finishing textile fabrics and in the machinery or apparatus connected therewith." *Letters Patent sealed.*

BOYD. 12th April 1867.

1089. HENRY PATTERSON BOYD, of Low Walker, near Newcastle-on-Tyne, in the County of Northumberland, Bolt Manufacturer, for an invention for—"Improvements in the manufacture of screws chiefly applicable for fixing armour plates." *Letters Patent sealed.*

WALLIS. 12th April 1867.

1090. JOSEPH WALTON WALLIS, of Sowerby Bridge, near Halifax, in the County of York, Merchant, for an invention for—"Improvements in 'tilloting' or wrappers for covering woollen fabrics known as 'long-ells' and Spanish stripes, suitable for the India and China markets." *Letters Patent sealed.*

WILMET. 12th April 1867.

1091. CONSTANT WILMET, of Brussels, in the Kingdom of Belgium, Tanner, for an invention for—"An accelerated tanning by means of new processes and apparatus." *Provisional protection only.*

HATTERSLEY. SMITH. 12th April 1867.

1092. RICHARD LONGDEN HATTERSLEY, of the firm of Geo. Hattersley and Sons, of Keighley, in the County of York, Machine Makers, and JOHN SMITH, of Sutton Cross Hills, in the same County, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

GARDNER. BICKERTON. 12th April 1867.

1093. CHARLES HENRY GARDNER, of West Harding Street, in the City of London, Printing Machine Manufacturer, and JOSEPH BICKERTON, of Oldham, in the County of Lancaster, Engineer, for an invention for—"Improvements in lithographic, zincographic and typographic printing machines." *Letters Patent sealed.*

DE BEAUMONT. 12th April 1867.

1094. HENRY BOUTHILLIER DE BEAUMONT, residing at No. 2, Rue du Calabri, Geneva, Switzerland, for an invention for—"Improvements in ploughs." *Provisional protection only.*

HEAD. 12th April 1867.

1095. THOMAS HOWARD HEAD, of the Teesdale Works, Stockton-on-Tees, for an invention for—"Improvements in machinery for rolling iron and steel." *Letters Patent sealed.*

CLARK. 12th April 1867.

1096. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for propelling vessels."—*A communication to him from abroad by Eugene Bachelier, Machinist, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

CLARK. 12th April 1867.

1097. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for obtaining isochronous movements applied to clocks and other timekeepers."—*A communication to him from abroad by Joseph Pizzocheri, Clock Maker to the Royal Family of Italy, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

SHORTREDE. 13th April 1867.

1098. ROBERT SHORTREDE, Major-General on the Retired List of Her Majesty's Indian Army, residing at Surbiton, in the County of Surrey, for an invention for—"Improving the process for finding the variation or error or deviation from the meridian on the common steering compass." *Letters Patent sealed.*

AITKEN. 13th April 1867.

1099. JOHN AITKEN, of Tottington Higher End, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in apparatus employed in the process of refining sugar." *Letters Patent sealed.*

CORNISH. 13th April 1867.

1100. KENNETH HENRY CORNISH, of No. 7, South Molton Street, in the County of Middlesex, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

STEVENS. 13th April 1867.

1101. EBENEZER STEVENS, of Pentonville Road, in the County of Middlesex, for an invention for—"Improvements in steels and forks, and in sharpeners for knives, scissors and edged tools." *Provisional protection only.*

SHORE. 13th April 1867.

1102. JOHN SHORE, of Numbers 19 and 20, Cardigan Street, Birmingham, in the County of Warwick, Brassfounder, for an invention for—"Improvements in the construction of valves and valve cocks." *Letters Patent sealed.*

JOBSON. 13th April 1867.

1103. JOHN JOBSON, of Derby, Iron Founder, for an invention for—"Improvements in kitchen ranges." *Letters Patent sealed.*

GILLYATT. 13th April 1867.

1104. CHARLES GEORGE GILLYATT, of Wickenby Manor, in the County of Lincoln, for an invention for—"Improvements in liquid-manure or water drills." *Letters Patent sealed.*

GREGORY. 13th April 1867.

1105. WILLIAM GREGORY, of the Township of Ardwick, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery for grinding and polishing metal and other surfaces." *Letters Patent sealed.*

VAUGHAN. HARSTON. 13th April 1867.

1106. REGINALD SAMUEL MORDAUNT VAUGHAN, of 54, Chancery Lane, in the County of Middlesex, and ARTHUR GEORGE HARSTON, of High Holborn, in the said County, for an invention for—"An improved window latch or fastener." *Letters Patent sealed.*

CROCKFORD. 13th April 1867.

1107. CHARLES CROCKFORD, of Holywell, in the County of Flint, Gentleman, for an invention for—"Improvements in obtaining useful products from certain materials produced in the process of galvanizing or coating iron with zinc." *Letters Patent sealed.*

GRACE. 13th April 1867.

1108. CHARLES GRACE, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in rudder pins and gudgeons." *Provisional protection only.*

HATTERSLEY. 13th April 1867.

1109. RICHARD LONGDEN HATTERSLEY, of the firm of George Hattersley and Sons, of Keighley, in the County of York, Machine Makers, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

RICHARDSON. GREENWOOD. 13th April 1867.

1110. JOHN RICHARDSON, of Bradford House, Harrogate, and CHARLES GREENWOOD, of 20, Parliament St., Harrogate, in the County of York, for an invention for—"Improvements in apparatus for coupling railway carriages and vehicles." *Letters Patent sealed.*

LANGLEY. 13th April 1867.

1111. ALFRED ANDREW LANGLEY, of Chapel-en-le-Frith, in the County of Derby, Civil Engineer, for an invention for—"Improvements in the arrangement of railway brakes." *Letters Patent sealed.*

BOUSFIELD. 13th April 1867.

1112. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of files." *—A communication to him from abroad by Carl Gustaf Gustafsson, a person resident at Tönköping, in the Kingdom of Sweden.* *Provisional protection only.*

ALEXANDER. 13th April 1867.

1113. ROBERT ALEXANDER, of Islington, Liverpool, in the County of Lancaster, for an invention for—"Improvements in compositions to be applied as coatings to preserve the surfaces of metals, wood, stone and all such like materials." *Letters Patent sealed.*

HARRISON. 13th April 1867.

1114. SAMUEL HARRISON, of West Street, Warwick, in the County of Warwick, Watch Maker, for an invention for—"Improvements in watches." *Letters Patent sealed.*

CLARK. 13th April 1867.

1115. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in typographic printing machines."—*A communication to him from abroad by Auguste Hippolyte Marinoni, Builder, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

CLARK. 13th April 1867.

1116. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in machines or apparatus for printing from engraved plates, blocks, lithographic stones, or from other like printing surfaces."—*A communication to him from abroad by Messieurs Kientzy, Sons, and Gedalge, all of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

COCHRAN. 13th April 1867.

1117. JOHN WEBSTER COCHRAN, of the City, County and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in cartridges for breech-loading fire-arms." *Letters Patent sealed.*

OAKDEN. PICKIN. 15th April 1867.

1118. The Rev^{d}. JOSEPH OAKDEN, of St. Stephen's Parsonage, Congleton, and JOSEPH PICKIN, of Dane Row, Buglawton, Congleton, for an invention for—"A new or improved enamel for enamelling metals and stones, to prevent rust, corrosion and incrustation." *Provisional protection only.*

LAKE. 15th April 1867.

1119. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in shoes for horses and cattle."—*A communication to him from abroad by Henry Franklin Shearman, of Elizabeth, New Jersey, and Thomas O'Leary, of Brooklyn, New York, both in the United States of America.* *Provisional protection only.*

BREAKELL. 16th April 1867.

1120. JOHN WILLIAM BREAKELL, of the City of Manchester, Manufacturer, for an invention for—"An improved mode of making windows in imitation of stained glass." *Provisional protection only.*

HODGKIN. 16th April 1867.

1121. JOHN ELIOT HODGKIN, of Liverpool, in the County of Lancaster, for an invention for—"Improvements in the manufacture of oakum and in the apparatus employed therein." *Letters Patent sealed.*

HARGREAVES. 16th April 1867.

1122. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in the manufacture of steel and soft iron from cast iron." *Provisional protection only.*

SIMPSON. 16th April 1867.

1123. GEORGE SIMPSON, of Glasgow, in the County of Lanark, North Britain, Civil and Mining Engineer, for an invention for—"Improvements in machinery for actuating tools used in mining or excavating or boring, part of the improved machinery being also applicable for actuating mine or other pumps." *Letters Patent sealed.*

RANKIN. 16th April 1867.

1124. DANIEL RANKIN, of the firm of Rankin and Blackmore, of Greenock, in the County of Renfrew, North Britain, Engineers and Ironfounders, for an invention for—"Improvements in oscillating steam-engines." *Letters Patent sealed.*

NUNN. NUNN. 16th April 1867.

1125. EDMUND BROOK NUNN, and JOSEPH PHILLIPS NUNN, both of Royston, in the County of Cambridge, for an invention for—"Improvements in apparatus for separating substances according to their nature or quality, particularly applicable to corn and seeds." *Letters Patent sealed.*

LEWTHWAITE. 16th April 1867.

1126. JOHN LEWTHWAITE, of High Street, in the Borough of Southwark, for an invention for—"Improvements in knife-cleaning machines." *Letters Patent sealed.*

GRAY. 16th April 1867.

1127. THOMAS WOOD GRAY, of Margaret St., Limehouse, for an invention for—"Improvements in Sir William Snow Harris's lightning conductors for ships, vessels, buildings and other structures." *Letters Patent sealed.*

WEILD. 16th April 1867.

1128. WILLIAM WEILD, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machines for winding yarn or thread on to bobbins, spools or similar surfaces, parts of which improvements are applicable to self-acting mules and like machines for spinning, doubling or twisting fibrous materials." *Letters Patent sealed.*

PRENTICE. RICHARDSON. 16th April 1867.

1129. EUSTACE CAREY PRENTICE, of Stowmarket, in the County of Suffolk, and THOMAS RICHARDSON, of Newbiggin, in the County of Northumberland, for an invention for—"Improvements in treating gun cotton." *Provisional protection only.*

BOBY. 16th April 1867.

1130. ROBERT BOBY, of Bury St. Edmund's, in the County of Suffolk, Machinist, for an invention for—"Improvements in ploughs and other agricultural implements, parts of which improvements are also applicable to wheeled carriages." *Letters Patent sealed.*

SHORE. 17th April 1867.

1131. SAMUEL SHORE, of Rochdale, in the County of Lancaster, for an invention for—"Improvements in apparatus for spinning and doubling fibrous materials." *Provisional protection only.*

BROOKS. 17th April 1867.

1132. JAMES SMITH BROOKS, of Cambridge Villas, Hackney, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the means of coloring tobacco pipes and other articles of meerschaum and massa." *Letters Patent sealed.*

TURNER. 17th April 1867.

1133. ARCHIBALD TURNER, of Leicester, in the County of Leicester, Elastic Web Manufacturer, for an invention for—"Improvements in the manufacture of elastic cords or bands applicable to various purposes, such as for driving bands, blind cords, and other analogous purposes in which a certain degree of elasticity is required." *Provisional protection only.*

BOBY.
17th April 1867.

1134. ROBERT BOBY, of Bury St. Edmund's, in the County of Suffolk, Machinist, for an invention for—"Improvements in screens or dressing machines for screening or sifting corn, seeds or other substances." *Letters Patent sealed.*

DALBY.
CHAPMAN.
17th April 1867.

1135. JOSEPH WILCOCK DALBY, and GEORGE ODAM CHAPMAN, both of Bradford, in the County of York, for an invention for—"Improvements in machinery for winding yarns, and also for printing the same simultaneously with the process of winding, at option." *Provisional protection only.*

WORNUM.
17th April 1867.

1136. ALFRED NICHOLSON WORNUM, of Store Street, Bedford Square, in the County of Middlesex, Pianoforte Manufacturer, for an invention for—"Improvements in pianofortes." *Letters Patent sealed.*

COCHRANE.
17th April 1867.

1137. WILLIAM COCHRANE, of Seghill House, Northumberland, for an invention for—"Improvements in apparatus for breaking down coal, stone and other minerals."—*A communication to him from abroad by Theophile Guibal, a person resident at Mons.* *Letters Patent sealed.*

HORSLEY.
17th April 1867.

1138. THOMAS HORSLEY, of 10, Coney Street, York, for an invention for—"Improvements in breech-loading fire-arms, and in apparatus for closing and re-priming cartridge cases for the same." *Letters Patent sealed.*

SCOTT.
18th April 1867.

1139. JOHN SCOTT, of Oxford Street, in the County of Middlesex, for an invention for—"Improvements in fire-escapes." *Letters Patent sealed.*

HOLDING.
HOLDING.
18th April 1867.

1140. WILLIAM HOLDING, Weaver, and JAMES HOLDING, Overlooker, both of Wheelton, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

WOLF.
18th April 1867.

1141. EDUARD WOLF, of the firm of I. and E. Wolf, of Fore Street, in the City of London, Merchants and Manufacturers, for an invention for—"Improvements in pipes for smoking." *Provisional protection only.*

BEGG.
18th April 1867.

1142. WILLIAM BEGG, of Marsh Lane Foundry, Preston, in the County of Lancaster, Iron Founder, for an invention for—"Improvements in apparatus for admitting and regulating the supply of air to furnaces." *Letters Patent sealed.*

LINDNER.
18th April 1867.

1143. EDWARD LINDNER, of the City of New York, in the United States of America, Engineer, for an invention for—"Improvements in breech-loading fire-arms, and likewise the cartridges and balls to be used therewith." *Letters Patent sealed.*

MELLIN.
ULBRICHT.
18th April 1867.

1144. JULIUS EDWARD MELLIN, and CLEMENT HENRY ULBRICHT, of Sherwood Street, Golden Square, in the County of Middlesex, Engineers, for an invention for—"Improvements in the construction of boxes or apparatus to contain address cards for public distribution." *Provisional protection only.*

RIPLEY.
18th April 1867.

1145. GEORGE RIPLEY, of Bradford, in the County of York, Gentleman, for an invention for—"Improved machinery for printing or colouring yarns." *Provisional protection only.*

WILKINSON.
18th April 1867.

1146. WILLIAM WILKINSON, of Jarrow, in the County of Durham, Engineer, for an invention for—"Improved apparatus for catching fish." *Letters Patent sealed.*

KIRRAGE.
20th April 1867.

1147. WILLIAM KIRRAGE, of No. 1, Bridge Road, Victoria Park, in the County of Middlesex, Surveyor, for an invention for—"An improvement in the manufacture of bricks and other materials, without the aid of artificial heat, for hydraulic and other purposes." *Letters Patent sealed.*

GRIFFITHS.
20th April 1867.

1148. ANNE ELIZA GRIFFITHS, of Kensington, in the County of Middlesex, Widow, for an invention for—"A new or improved pan for cooking omelettes or for other similar purposes." *Provisional protection only.*

MCKECHNIE.
20th April 1867.

1149. JOHN MCKECHNIE, of Glasgow, in the County of Lanark, North Britain, General Merchant, for an invention for—"Improvements in apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses." *Provisional protection only.*

MILLWARD.
20th April 1867.

1150. JOHN MILLWARD, of Birmingham, in the County of Warwick, Civil Engineer, for an invention for—"Improvements in brewers' mash tuns."—*A communication to him from abroad by James Walker, of Cincinnati, Ohio, United States of America.* *Letters Patent sealed.*

LEE.
LANKESTER.
20th April 1867.

1151. THOMAS VINCENT LEE, of Macclesfield, in the County of Chester, Civil Engineer, and CHARLES EDMUND LANKESTER, of Peckham, in the County of Surrey, Gentleman, for an invention for—"Improvements in the manufacture of colours and the extraction of colouring and dyeing matters from coal oil, shale oil or coal tar combined with peat or turf, and for a combination of any of these substances, and also for the utilization of the residue for the purpose of what is known as moulders' blacking, after the colouring and dyeing matters have been extracted."
Provisional protection only.

GALLOWAY.
SETTLE.
20th April 1867.

1152. JAMES GALLOWAY, Brass Founder, and THOMAS SETTLE, Spindle and Flyer Manufacturer, both of Bolton, in the County of Lancaster, for an invention for —"Improvements in machinery for preparing cotton and other fibrous substances."
Provisional protection only.

HARRISON.
20th April 1867.

1153. WILLIAM HARRISON, of Wharton Green, Winsford, in the County of Cheshire, in the United Kingdom of Great Britain and Ireland, Salt Manufacturer, for an invention for—"An improved method of consuming smoke in furnaces."
Complete specification; Letters Patent sealed.

DAVIS.
20th April 1867.

1154. LEVI DAVIS, of Edgbaston, in the County of Warwick, Manufacturer, for an invention for—"Improvements in hat guards." *Provisional protection only.*

PETRIE.
ACKROYD.
20th April 1867.

1155. JOHN PETRIE the younger, of Rochdale, in the County of Lancaster, Machine Maker, and REUBEN ACKROYD, of Ovenden, near Halifax, in the County of York, Wool Comber, for an invention for—"Improvements in machinery for washing wool and other fibrous materials." *Provisional protection* NOT *granted.*

COCKER.
20th April 1867.

1156. SAMUEL COCKER, of Sheffield, in the County of York, Manufacturer, for an invention for—"Improvements in axles for carriages."—*A communication to him from abroad by Frederick William Richter, of Harthau, near Chemnitz, in the Kingdom of Saxony.* *Provisional protection only.*

HOWELL.
HARDY.
20th April 1867.

1157. EDWARD HOWELL, and THOMAS HARDY, both of Poole, in the County of Dorset, for an invention for—"Improvements in the construction of horse rakes."
Letters Patent sealed.

FRITH.
20th April 1867.

1158. RICHARD HASTINGS FRITH, of 101, Lower Gardiner Street, in the City of Dublin, Civil Engineer, for an invention for—"Improvements in distributing and measuring gas, steam, water and other fluids, and in the apparatus or means employed therein." *Letters Patent sealed.*

ROBY.
20th April 1867.

1159. JOHN BOYLES ROBY, of Featherstone Street, St. Luke's, in the County of Middlesex, Whalebone Cutter, for an invention for—"Improvements in the preparation of buffalo horn as a substitute for whalebone." *Provisional protection only.*

ATKINSON.
20th April 1867.

1160. JOHN ATKINSON, of the Steam Wheel and Patent Arm and Axle Manufactory, Victoria Road, Leeds, in the County of York, for an invention for—"Improvements in the construction of wheels." *Letters Patent sealed.*

CROSSLEY.
20th April 1867.

1161. WILLIAM GEORGE CROSSLEY, of the Town of Cambridge, Dentist, for an invention for—"Improvements in velocipedes." *Letters Patent sealed.*

FASSMANN.
20th April 1867.

1162. HENRY FASSMANN, of New Orleans, Louisiana, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in metal ties or bands for securing bales of cotton, wool and other substance." *Letters Patent sealed.*

COCHRAN.
20th April 1867.

1163. JOHN WEBSTER COCHRAN, of the City, County and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

PEEBLES.
22nd April 1867.

1164. JOHN PEEBLES, of Errol, in the County of Perth, North Britain, for an invention for—"Improvements in motive-power engines."
Provisional protection only.

DE TIVOLI.
22nd April 1867.

1165. CESAR DE TIVOLI, of No. 1, Great Winchester Street Buildings, in the City of London, County of Middlesex, for an invention for—"An improved breech-loading needle rifle and improved cartridge."—*A communication to him from abroad by Signor Francesco Glisenti, of Brescia, Italy.* *Provisional protection only.*

FRYER.
22nd April 1867.

1166. DANIEL FRYER, of 18, Carlton Square, Old Kent Road, Agent, for an invention for—"Improvements in lamps." *Provisional protection only.*

NEEDHAM. 22nd April 1867.

1167. JOSEPH NEEDHAM, of Piccadilly, in the County of Middlesex, Gunmaker, for an invention for—"Improvements in breech-loading fire-arms."
Letters Patent sealed.

GEDGE. 22nd April 1867.

1168. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved construction and manufacture of the iron forks used in agriculture."—*A communication to him from abroad by Louis Gabriel Hébert Fleury, of 15, Passage des Petites Ecuries, Paris, France.*
Provisional protection only.

GEDGE. 22nd April 1867.

1169. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved method of and apparatus for galvanizing or tinning and zinking iron wire and other description of iron."—*A communication to him from abroad by Emile Delacroix, of 15, Passage des Petites Ecuries, Paris, France, Doctor of Medicine.* *Provisional protection only.*

MANNIX. 22nd April 1867.

1170. JAMES BALL MANNIX, of Limerick, Ireland, for an invention for—"Improvements in the permanent way of railways."—*A communication to him from abroad by Robert Mudge Marchant, James Richard Davies and John Allman Marchant, all of Wellington, New Zealand.* *Letters Patent sealed.*

HOOK. HOOK. 22nd April 1867.

1171. CHARLES TOWNSEND HOOK, and EUSTACE HOOK, both of Snodland, in the County of Kent, Paper Makers, for an invention for—"Improvements in the manufacture of paper and of the chemical matters employed therein."—*The result partly of a communication made to them from abroad by Ernest Pinchon, of Bacqueville, France, and partly of invention or discovery made by themselves."*
Letters Patent sealed.

RIGG. 23rd April 1867.

1172. The Reverend ARTHUR RIGG, of the City of Chester, Clerk in Holy Orders, Master of Arts, for an invention for—"Improvements in apparatus for grinding corn, grain and other similar substances." *Letters Patent sealed.*

PLEWS. 23rd April 1867.

1173. JOHN PLEWS, Civil Engineer, of 3, Bucklersbury, in the City of London, for an invention for—"An improvement in cartridges for fire-arms and ordnance."
Provisional protection only.

LEIGH. 23rd April 1867.

1174. ELISHA LEIGH, of 7, Cleveland Square, Liverpool, in the County of Lancaster, for an invention for—"Improvements in bowls, jugs, and all kinds of covered and uncovered articles or vessels made of glass, china, stone or earthenware and other plastic materials." *Provisional protection NOT granted.*

WHITTAKER. CROASDALE. 23rd April 1867.

1175. DAVID WHITTAKER, and BENJAMIN CROASDALE, of Blackburn, in the County of Lancaster, for an invention for—"Improvements in healds or heddles used in looms for weaving." *Provisional protection only.*

WESTWOOD. 23rd April 1867.

1176. JOSEPH WESTWOOD, of Tredegar House, Bow, in the County of Middlesex, Engineer, for an invention for—"Improvements in turrets and broadsides of ships of war." *Provisional protection only.*

LAKE. 23rd April 1867.

1177. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved feeder or hopper for centrifugal sugar machines."—*A communication to him from abroad by Helem Merrill, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

LAKE. 23rd April 1867.

1178. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of and apparatus for removing the contents from centrifugal sugar machines."—*A communication to him from abroad by Helem Merrill, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

LAKE. 23rd April 1867.

1179. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of and apparatus for sprinkling or diffusing liquids for refining sugar and other purposes."—*A communication to him from abroad by Helem Merrill, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

MACKIE. 23rd April 1867.

1180. SAMUEL JOSEPH MACKIE, of St. Peter's Terrace, Kensington Park Road, Bayswater, in the County of Middlesex, for an invention for—"Improvements in apparatus for burning petroleum and other combustible fluids." *Letters Patent sealed.*

NEWTON. 23rd April 1867.

1181. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of blowing and pumping engines."—*A communication to him from abroad by Philander Higley Roots, of Cornersville, in the State of Indiana, United States of America.* *Letters Patent sealed.*

BRICKLES. JACKSON. BERRY. 23rd April 1867.

1182. JESSE BRICKLES, of Manchester, in the County of Lancaster, Gentleman, JOHN SAMUEL JACKSON, of Pendleton, in the said County, Warehouseman, and WALTER SCOTT BERRY, of Manchester aforesaid, Warehouseman, for an invention for—"Improvements in the production of designs upon fabrics composed of fibrous materials." *Provisional protection only.*

HAWORTH. 24th April 1867.

1183. JOHN HAWORTH, of Mode Wheel House, near the City of Manchester, Gentleman, for an invention for—"Improvements in portable apparatus for issuing tickets progressively numbered, to passengers in public conveyances and to visitors at public meetings." *Letters Patent sealed.*

WILKINSON. 24th April 1867.

1184. WILLIAM FREEMAN WILKINSON, of the firm of Wilkinson and Son, of Eagle Foundry, Ely, in the County of Cambridge, for an invention for—"Improvements in horse-hoes." *Letters Patent sealed.*

SMALLEY. BRIDGE. 24th April 1867.

1185. JAMES SMALLEY, of Liverpool, in the County of Lancaster, Engineer, and SAMUEL BRIDGE, of the same place, Engineer's Fitter, for an invention for—"Improvements in apparatus for mixing paint, putty and other like substances." *Provisional protection only.*

BRUEN. 24th April 1867.

1186. LEWIS BUDD BRUEN, of the City, County and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

TIVEY. 24th April 1867.

1187. THOMAS TIVEY, of Derby, Manager, in the employ of Messrs. Joseph Davenport and Son, also of Derby, for an invention for—"Improvements in means or apparatus for the production of narrow weavings." *Letters Patent sealed.*

WHATELEY. 24th April 1867.

1188. CHARLES FREDERICK WHATELEY, of Birmingham, in the County of Warwick, Nautical Instrument Maker, for an invention for—"Improved apparatus for generating and distributing vapour." *Provisional protection only.*

BRICKLES. 24th April 1867.

1189. JOHN DAVID BRICKLES, of Valentine Road, South Hackney, in the County of Middlesex, Warehouseman, for an invention for—"Improvements in the manufacture of a certain description of woven fabric." *Letters Patent sealed.*

JOHNSON. 24th April 1867.

1190. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the treatment of peat and in the manufacture of peat charcoal, and in the machinery or apparatus employed therein."—*A communication to him from abroad by Augustus Figge, Civil Engineer, of Hanover.* *Letters Patent sealed; no specification filed.*

SOUTH. 24th April 1867.

1191. THOMAS SOUTH, of Bridge Street, Southwark, in the County of Surrey, Gas Fitter, for an invention for—"A combined gas lighting and cooking apparatus." *Provisional protection only.*

LAKE. 24th April 1867.

1192. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the means for checking and guiding horses."—*A communication to him from abroad by William Clark, of Valatie, and William Griffin, of Lansingburgh, both in New York, United States of America.* *Letters Patent sealed.*

CROSSLEY. 24th April 1867.

1193. FRANK CROSSLEY, of the firm of John M. Dunlop and Co., of Manchester, Engineer, for an invention for—"Improvements in cutting india-rubber or other materials into strips or thread." *Provisional protection only.*

LEMIELLE. 25th April 1867.

1194. THEODORE LEMIELLE, of Valenciennes, in the Empire of France, Civil Engineer, for an invention for—"A new improved apparatus applicable to the ventilation of mines, buildings and other places." *Provisional protection* NOT *granted.*

GORDON.
25th April 1867.

1195. GEORGE GORDON, of San Francisco, California, at present residing at Morley's Hotel, Charing Cross, in the County of Middlesex, for an invention for—"Improved means and apparatus for drying moist substances or drying and burning granular substances, or evaporating liquid substances, and economizing the waste heat produced in the processes." *Provisional protection only.*

LAKE.
25th April 1867.

1196. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the construction of knives, forks and other implements of cutlery."—*A communication to him from abroad by George Parr, of Buffalo, New York, United States of America.*
Provisional protection only.

WORTH.
25th April 1867.

1197. SAMUEL LEAKE WORTH, of 293, Oxford Street, in the County of Middlesex, Brush Manufacturer, for an invention for—"An improved apparatus for sweeping carpets, floors and surfaces." *Provisional protection only.*

BROOMAN.
25th April 1867.

1198. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"A new or improved process of destroying vegetable matters in wools, noils, woollen waste and rags."—*A communication to him from abroad by Constant Schaller, of Bischwiller, France.* *Letters Patent sealed.*

WETTON.
GALSWORTHY.
25th April 1867.

1199. CHARLES EDGAR WETTON, and WILLIAM GALSWORTHY, both of Grimsbury, in the County of Northampton, for an invention for—"Improvements in apparatus for regulating the supply of liquids or fluids."
Provisional protection only.

BROOMAN.
25th April 1867.

1200. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"A new or improved process of preserving meat, fish and other substances."—*A communication to him from abroad by Francesco Cirio, of Turin, Italy.*
Provisional protection only.

RAYWOOD.
25th April 1867.

1201. JOHN RAYWOOD, Machinist, of Wentworth, near Rotherham, Yorkshire, for an invention for—"An improved dial to be used as an office or a private or commercial indicator." *Provisional protection only.*

CLARK.
25th April 1867.

1202. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved self-acting tackle hook."—*A communication to him from abroad by Charles Luxton, of Hudson, State of New Jersey, United States of America.* *Letters Patent sealed.*

MILLWARD.
25th April 1867.

1203. JOHN MILLWARD, of Birmingham, in the County of Warwick, Civil Engineer, for an invention for—"Improvements in steam-engines."—*A communication to him from abroad by Frederick W. Gordon, of Cincinnati, Ohio, United States of America.* *Provisional protection only.*

SMITH.
25th April 1867.

1204. HUGH SMITH, of Much Hadham, in the County of Herts, for an invention for—"Improvements in preparing turnips and mangel-wurzel for food of animals." *Letters Patent sealed.*

FITTON.
DEAR.
26th April 1867.

1205. EDWARD GERRARD FITTON, and SOMERVILLE DEAR, both of Leeds, in the County of York, Machinists, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

ABEL.
26th April 1867.

1206. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the means and apparatus for pulverizing substances, more particularly applicable to the pulverization of materials for porcelain paste."—*A communication to him from abroad by Carl Fredrik Tjulander, Lieutenant, and Johan Robert Alsing, Proprietor of Mines, both of Stockholm, in the Kingdom of Sweden.*
Provisional protection only.

BURTON.
26th April 1867.

1207. JOHN WATSON BURTON, of Leeds, in the County of York, Gentleman, for an invention for—"Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment." *Letters Patent sealed.*

BOOTH.
26th April 1867.

1208. TEMPEST BOOTH, of Ardwick, in the County of Lancaster, Gum and Starch Manufacturer, for an invention for—"Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm." *Letters Patent sealed.*

ARCHIBALD.
26th April 1867.

1209. JAMES ARCHIBALD, of No. 22, Coleman Street, in the City of London, Attorney's Clerk, for an invention for—"Improvements in the construction of tents by lacing instead of buttoning as heretofore, and transforming the same into ambulances to carry crippled and wounded men."—*A communication to him from abroad by Alfred Varnier, of No. 84, Quai des Chartrous, Bordeaux, in the Empire of France, Gentleman.* *Provisional protection only.*

JOHNSON.
26th April 1867.

1210. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in magneto-electric machines."—*A communication to him from abroad by Joseph Nicolas Maximilien Van Malderen, of Paris, in the Empire of France.* *Provisional protection only.*

CLARK.
26th April 1867.

1211. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in life boats."—*A communication to him from abroad by Albert Lintonner Shears, of Flint, Genesse County, and William Spencer Driggs, of East Saginaw, Saginaw County, both in the State of Michigan, United States of America.* *Letters Patent sealed.*

GUENIN.
26th April 1867.

1212. EMILE GUENIN, of Henrietta Street, Covent Garden, in the County of Middlesex, for an invention for—"Improvements in the preparation and application of mustard for curative purposes."—*A communication to him from abroad by Paul Rigollot, of Paris, in the Empire of France, Chemist.* *Letters Patent sealed.*

CLARK.
26th April 1867.

1213. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in electric telegraph apparatus."—*A communication to him from abroad by Secondo Roos, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed and specification filed by order.*

HUDDART.
26th April 1867.

1214. GEORGE AUGUSTUS HUDDART, of Brynkir, in the County of Carnarvon, Gentleman, for an invention for—"Improvements in buttons and in the attachment of buttons to garments and fabrics." *Letters Patent sealed.*

NEWTON.
26th April 1867.

1215. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for burring wool, ginning cotton or other analogous purposes."—*A communication to him from abroad by Robert J. Clay, James T. Husted, Ebenezer Gilbert Burling, and Cornelius Corson, all of the City and State of New York, United States of America.* *Letters Patent sealed.*

BRUEN.
26th April 1867.

1216. LEWIS BUDD BRUEN, of the City, County and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in shot cartridges." *Provisional protection only.*

POLLARD.
26th April 1867.

1217. GEORGE POLLARD, of Hayfield, in the County of Derby, for an invention for—"Improvements in apparatus for reducing and regulating the quantity and pressure of steam, fluids and gases." *Letters Patent sealed.*

COCHRAN.
27th April 1867.

1218. JOHN WEBSTER COCHRAN, of the City, County and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"An improved level."—*The result partly of a communication from abroad by Charles Wells, a person resident at Bridgeport, Connecticut, United States of America, and partly of invention and discovery made by him.* *Provisional protection only.*

MOSELEY.
MOSELEY.
27th April 1867.

1219. JOSEPH MOSELEY, and CHARLES MOSELEY, of the firm of David Moseley and Sons, of the Chapel Field Works, Ardwick, in the City of Manchester, India-Rubber Manufacturers, for an invention for—"Improvements in coverings for rollers of machines which are required to be smooth and elastic." *Letters Patent sealed.*

BIRKETT.
27th April 1867.

1220. DANIEL BIRKETT, of the City of Carlisle, Architect, for an invention for —"Improvements in the construction of fire-proof floors." *Provisional protection only.*

CARISS.
27th April 1867.

1221. JOHN CARISS, of Kilburn West, in the County of Middlesex, Superintendant of Works, for an invention for—"Improvements in the mechanism or apparatus employed for locking, actuating and setting in motion railway points and signals, also in the apparatus for regulating or governing the action and movement of such points and signals in relation to each other." *Letters Patent sealed.*

DEWAR. 27th April 1867.

1222. JAMES DEWAR, Doctor of Medicine, residing in Kirkcaldy, in the County of Fyfe, North Britain, for an invention for—"Improvements upon the instrument called the 'Spray producer.'" *Letters Patent sealed.*

SPEIGHT. 27th April 1867.

1223. JOHN SPEIGHT, of Bradford, in the County of York, Worsted Spinner, for an invention for—"Improvements in machinery or apparatus for spinning worsted or other fibrous substances." *Provisional protection only.*

LOWTHER. 27th April 1867.

1224. JOSEPH WILSON LOWTHER, of the City of Manchester, in the County of Lancaster, Manufacturer, for an invention for—"Certain improvements in lubricators to be used for the bottom ends of vertical spindles or shafts." *Provisional protection only.*

PATON. 27th April 1867.

1225. THOMAS PATON, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in the construction of motive-power engines." *Letters Patent sealed.*

CROOKE. WRIGHTSON. 27th April 1867.

1226. WALTER CROOKE, and THOMAS WRIGHTSON, of the Teesdale Iron Works, Stockton-on-Tees, for an invention for—"Improvements in hoists suitable for raising and lowering weights." *Letters Patent sealed.*

SWINBURNE. 27th April 1867.

1227. JOHN SWINBURNE, of No. 4, Wenlock Street, Shepherdess Walk, City Road, in the County of Middlesex, for an invention for—"Improvements in steam-boiler furnaces." *Letters Patent sealed.*

TAYLOR. 27th April 1867.

1228. JOHN TAYLOR, of 6, Whitehall, in the City of Westminster, in the County of Middlesex, Architect, for an invention for—"Improvements in seats and sofas." *Letters Patent sealed.*

GUENIN. 27th April 1867.

1229. EMILE GUENIN, of Henrietta Street, in the County of Middlesex, for an invention for—"Improvements in the disinfection and treatment of fecal and other matters for the manufacture of manure."—*A communication to him from abroad by Louis Verstraet, of Paris, in the Empire of France, Chemist.* *Provisional protection only.*

CHAPMAN. 27th April 1867.

1230. REGINALD FOSTER CHAPMAN, of Preston, in the County of Lancaster, Gentleman, for an invention for—"Improvements in signalling on railways." *Provisional protection only.*

BROOMAN. 27th April 1867.

1231. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the manufacture of cartridges for breech-loading arms."—*A communication to him from abroad by Alfred Isidore Honoré Parent, of Paris, France.* *Letters Patent sealed.*

WATSON. 29th April 1867.

1232. THOMAS WATSON, of Scatcliffe, near Accrington, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for warping or beaming yarns or threads." *Provisional protection only.*

LAWTON. 29th April 1867.

1233. JOSEPH FEARNS LAWTON, of Micklehurst, in the County of Chester, for an invention for—"Certain improvements in the method of producing a variation of color during manufacture upon woollen, cotton or other fibrous yarns or threads." *Letters Patent sealed.*

DAVIES. 29th April 1867.

1234. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved packing for stuffing boxes."—*A communication to him from abroad by Ivon Bruce Miller, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

BIRD. 29th April 1867.

1235. JACOB BIRD, of Bromborough-Pool, in the County of Chester, Engineer, for an invention for—"Improvements in the construction of buckets for air and other pumps." *Letters Patent sealed.*

HUGHES. 29th April 1867.

1236. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in bobbins."—*A communication to him from abroad by Frederick Wolcott Northrop, of New Haven, in the County of New Haven, State of Connecticut, United States of America, and Ezra Silliman Munson, of North Haven, in the County of New Haven, State of Connecticut, United States of America.* *Letters Patent sealed.*

ALLIBERT.
29th April 1867.

1237. PHILIPPE JEAN JACQUES ALLIBERT, of No. 10, Boulevard de Clichy, Paris, in the Empire of France, for an invention for—"Improvements in preventing incrustations in steam-boilers."—*A communication from Monsieur Elie Ducros, a person resident at Nîmes, in the Empire of France.* *Letters Patent sealed.*

JOHNSON.
29th April 1867.

1238. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"An improved apparatus for preventing the access of insects to the interior of dwellings, and to pictures, mirrors and articles of furniture."—*A communication to him from abroad by John George De Coursey, of Philadelphia, Pennsylvania, United States of America.*
Provisional protection NOT *granted.*

MENNONS.
29th April 1867.

1239. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"An improved alarm apparatus for indicating and registering the rise of water in the holds of ships or vessels."—*A communication to him by Charles Benjamin Norton, a person resident at No. 91, Champs Elysees, Paris, in France.*
Letters Patent sealed.

WATERMAN.
29th April 1867.

1240. EDWARD WATERMAN, of the City and County of Bristol, Boot and Shoe Manufacturer, for an invention for—"An improved manufacture of boots and shoes."
Letters Patent sealed.

COMBE.
29th April 1867.

1241. JAMES COMBE, of Belfast, in the County of Antrim and Kingdom of Ireland, for an invention for—"Improvements in winding or balling, and in the manipulation of twisted fibrous substances." *Letters Patent sealed.*

SMITH.
WESTHEAD.
29th April 1867.

1242. ROBERT SMITH, Manager, and MARCUS BROWN WESTHEAD, Merchant, both of Manchester, in the County of Lancaster, for an invention for—"Improvements in making up tapes and other narrow fabrics." *Letters Patent sealed.*

BELL.
BELL.
29th April 1867.

1243. THOMAS BELL, and THOMAS LESSLIE GREGSON BELL, of the Vitriol Works, near Victoria Docks, for an invention for—"Improvements in the manufacture of manures." *Provisional protection only.*

SEVERN.
30th April 1867.

1244. GEORGE SEVERN, of Hampstead Road, in the County of Middlesex, for an invention for—"Improvements in rails for tramways and in the axles of the carriages intended to run thereon." *Letters Patent sealed.*

DAVIES.
30th April 1867.

1245. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in cutting and dressing millstones, and in apparatus to be employed for such purpose."—*A communication to him from abroad by Samuel Golay, of Paris.* *Letters Patent sealed.*

BOOTH.
BOOTH.
30th April 1867.

1246. ROBERT BOOTH, and RICHARD WILSON BOOTH, both of Upper Stephen Street, in the City of Dublin, for an invention for—"An improved fret-sawing machine." *Provisional protection only.*

SWIFT.
30th April 1867.

1247. HENRY SPINK SWIFT, of No. 99, Hill Street, Peckham, in the County of Surrey, Gentleman, for an invention for—"An improvement in the shape of and in the manner of applying the marine screw propeller." *Provisional protection only.*

RIDLEY.
WITHERS.
30th April 1867.

1248. ROBERT WOOD RIDLEY, of Birmingham, in the County of Warwick, Engineer, and JOHN WITHERS, of Handsworth, in the County of Stafford, Agent, for an invention for—"Improvements in indicating measure taps for drawing off liquids." *Letters Patent sealed.*

DEELEY.
30th April 1867.

1249. ELI DEELEY, of Pelsall, in the County of Stafford, Hoop Roller, for an invention for—"Improvements in rolling hoop iron." *Provisional protection only.*

DAVIES.
30th April 1867.

1250. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved combined taper holder and match box."—*A communication to him from abroad by John A. Whipple, of Boston, Massachusetts, in the United States of America.* *Letters Patent sealed.*

WEBB.
30th April 1867.

1251. THOMAS WEBB, of Cross Street, Newington Butts, in the County of Surrey, Machinist, for an invention for—"Improvements in the construction of sewing-machines." *Provisional protection only.*

HODGSON. 30th April 1867.

1252. GEORGE HODGSON, of Bradford, in the County of York, Machine Maker, for an invention for—"Improvements in power looms." *Letters Patent sealed.*

MARSHALL. 30th April 1867.

1253. JOHN MARSHALL, of Wednesbury, in the County of Stafford, Iron Master, for an invention for—"Improvements in the manufacture of gun barrels and ordnance, which improvements are also applicable to the manufacture of iron and steel tubes for various purposes." *Provisional protection only.*

CLARK. 30th April 1867.

1254. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of sugar."—*A communication to him from abroad by Louis Joseph Frédéric Margueritte, Chemist, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

DE GRELLE. 30th April 1867.

1255. CHARLES DE GRÉLLE, of Basinghall Street, in the City of London, Merchant, but at present residing at Brussels, in the Kingdom of Belgium, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from Monsieur Pierre Antoine Loron, of Barchon, near Liège, in the Kingdom of Belgium.* *Provisional protection only.*

SNELL. 1st May 1867.

1256. WILLIAM SNELL, of 16, Clement's Inn, in the City of Westminster, for an invention for—"An improvement in the manufacture of boots and shoes, and other articles of leather or kindred substances."—*A communication to him from abroad from Thomas Briggs Smith, of the City of Boston, in the State of Massachusetts, and United States of America.* *Complete specification; Letters Patent sealed.*

LOUET. 1st May 1867.

1257. ANTOINE LOUET, of the firm of Louet Brothers, of the City of Issoudun, in the Empire of France, Merchant, for an invention for—"Improvements in the construction of movable palisades for parks, gardens and enclosures, the said invention being also applicable to training espaliers, vines and shrubs." *Provisional protection only.*

GEDGE. 1st May 1867.

1258. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in mattrasses, pillows, cushions and analogous articles."—*A communication to him from abroad by Thérèse Amine Petiteau, born Versepuy, of 39, Faubourg St. Martin, Paris, France.* *Letters Patent sealed.*

KRAFFERT. 1st May 1867.

1259. JAMES JULIUS KRAFFERT, of Berlin, in the Kingdom of Prussia, Engineer, for an invention for—"A new self-acting repeating rifle." *Provisional protection only.*

YOUNG. 1st May 1867.

1260. REUBEN YOUNG, of Redditch, in the County of Worcester, Fancy Needle Case Maker, for an invention for—"Improvements in cases and boxes for holding needles, pins and other articles." *Provisional protection only.*

JOSSA. 1st May 1867.

1261. FERDINAND JOSSA, of Phœnix Oil Works, Fence Houses, in the County of Durham, Manufacturing Chemist, for an invention for—"Improvements in lubricators for the supply of mineral and other oils to bearings and journals of shafts, pit tubs, and other parts requiring lubrication." *Letters Patent sealed.*

CLUM. 1st May 1867.

1262. HENRY AUGUSTUS CLUM, of Rochester, in the United States of America, but now of Euston Square, in the County of Middlesex, Professor of Natural Science, for an invention for—"Improvements in instruments for indicating atmospheric changes and the force of storms." *Letters Patent sealed.*

HOWELL. 1st May 1867.

1263. JOHN HOWELL, of Creekmore, near Poole, in the County of Dorset, for an invention for—"Improvements in hay and chaff cutting machines." *Letters Patent sealed.*

JOHNSON. 1st May 1867.

1264. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"A novel flux applicable to welding, brazing and puddling purposes."—*A communication to him from abroad by Anthony Hindermyer, of Rohrertown, in the State of Pennsylvania, United States of America.* *Provisional protection only.*

JOHNSON. 1st May 1867.

1265. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in boots and shoes."—*A communication to him from abroad by George Franklin Chase, of Boston, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

JOHNSON. 1st May 1867.

1266. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in boots and shoes."—*A communication to him from abroad by Albert Van Wagenen, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

NORTON. 1st May 1867.

1267. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in drying machines." *Provisional protection only.*

NEWINGTON. 1st May 1867.

1268. SAMUEL NEWINGTON, of Ticehurst, in the County of Sussex, Member of the Royal College of Physicians, London, for an invention for—"Improvements in buildings and structures to be employed for horticultural uses." *Letters Patent sealed.*

BIGELOW. 1st May 1867.

1269. ERASTUS BRIGHAM BIGELOW, of Boston, United States of America, now residing at the Hotel du Rhin, Place Vendôme, in the City of Paris, in the Empire of France, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

THOMLINSON. 1st May 1867.

1270. JOHN THOMLINSON, of Carlisle, in the County of Cumberland, Plaster of Paris Manufacturer, for an invention for—"Improvements in the construction of fire-proof and other ceilings and floors." *Provisional protection only.*

BROWN. 2nd May 1867.

1271. JOHN BROWN, Chairman of the firm of John Brown and Company, Limited, of Sheffield, in the County of York, for an invention for—"Improvements in the construction of fortifications." *Letters Patent sealed.*

SALMON. 2nd May 1867.

1272. PETER SALMON, of 6, Great Smith Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in the manufacture of gas and in the apparatus for holding the same." *Provisional protection only.*

LOMAX. LOMAX. 2nd May 1867.

1273. JAMES LOMAX, and JOHN LOMAX, of Farnworth, near Bolton, in the County of Lancaster, Engineers and Millwrights, for an invention for—"Improvements in the manufacture of wagons for collieries, railways and other similar purposes." *Letters Patent sealed.*

BONNEVILLE. 2nd May 1867.

1274. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"Improvements in ribbon looms."—*A communication from Antony Barrallon, a person resident at Saint Etienne, in the Empire of France, aforesaid.* *Letters Patent sealed.*

BONNEVILLE. 2nd May 1867.

1275. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"A new and improved means of transmitting by electricity the hour and the synchronism of the hours between public and private clocks."—*A communication from Victor Delay, a person resident at Lyons, in the Empire of France, aforesaid, Gentleman.* *Letters Patent sealed; no specification filed.*

BONNEVILLE. 2nd May 1867.

1276. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in apparatus for facilitating the means of learning how to write."—*A communication from Léon Woog, a person resident at Boulevart du Prince-Eugène, in Paris, aforesaid.* *Provisional protection only.*

BRUNIER. 2nd May 1867.

1277. AUGUSTE BRUNIER, of 15, Passage des Petites Ecuries, Paris, in the Empire of France, Merchant, for an invention for—"An improved hat cover." *Provisional protection only.*

COLLETTE. 2nd May 1867.

1278. CHARLES HASTINGS COLLETTE, of No. 23, Lincoln's Inn Fields, in the County of Middlesex, Solicitor, for an invention for—"Improvements in the construction of flights of stairs commonly called staircases."—*A communication to him from abroad by Antoine Garzend, of No. 47, Rue des Martyrs, Paris, in the Empire of France.* *Provisional protection only.*

ABEL. 2nd May 1867.

1279. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"A new or improved system of and apparatus for administrative telegraphy."—*A communication to him from abroad by Adolphe Bergmüller, of Vienna, in the Empire of Austria, Engineer.* *Letters Patent sealed.*

SMYTH.
KIRBY.
2nd May 1867.

1280. JAMES SMYTH, of 59, Wood Street, Woolwich, in the County of Kent, and SAMUEL KIRBY, of Harpur Place, Bedford, for an invention for—"Improvements in clarinets, oboes, bassoons, and such like metal and wood wind musical instruments." *Provisional protection only.*

WALTON.
2nd May 1867.

1281. FREDERICK WALTON, of the Old Hall Works, Wolverhampton, in the County of Stafford, Manufacturer, for an invention for—"Improvements in apparatus for making infusions of coffee and other infusions." *Letters Patent sealed.*

DUTTON.
2nd May 1867.

1282. CHARLES DUTTON, of West Bromwich, in the County of Stafford, Engineer, for an invention for—"Improvements in revolving screens for screening coal and other materials." *Letters Patent sealed.*

SCHOTT.
ROSENTHAL.
2nd May 1867.

1283. GUSTAVUS ADOLPHUS JOHN SCHOTT, and JOHN SIEGMUND ROSENTHAL, both of Bradford, in the County of York, Woollen Spinners, for an invention for—"An improved species of yarn." *Letters Patent sealed.*

WOOD.
2nd May 1867.

1284. THOMAS WOOD, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in safety valves and arrangements for preventing damage to or the explosion of steam-boilers."—*A communication to him from abroad by Murdoch Macpherson, of the Baltic Iron Works, St. Petersburg, Russia.* *Letters Patent sealed.*

JOHNSON.
2nd May 1867.

1285. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in locomotive and traction engines, applicable also to the raising of heavy bodies."—*A communication to him from abroad by Theodore Krausch, of the City of Philadelphia and State of Pennsylvania, United States of America.* *Provisional protection only.*

STUART.
SMITH.
2nd May 1867.

1286. JOSEPH STUART, of Ludgate Hill, in the City of London, and JAMES HENRY SMITH, of East Road, Hoxton, in the County of Middlesex, for an invention for—"An improved combination of mechanism for operating certain parts of sewing-machines." *Letters Patent sealed.*

LAKE.
2nd May 1867.

1287. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved nutmeg-grater."—*A communication to him from abroad by Henry Josiah Griswold, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

COLLINS.
2nd May 1867.

1288. JOHN FLETCHER COLLINS, of the City, County and State of New York, United States of America, for an invention for—"Improvements in the manufacture of alcohol and other spirits." *Letters Patent sealed.*

RITCHIE.
2nd May 1867.

1289. CHARLES RITCHIE, of Upper Tulse Hill, Brixton, in the County of Surrey, for an invention for—"Improvements in apparatus for storing and drawing off beer, wine and other materials." *Provisional protection only.*

CHEVRON.
3rd May 1867.

1290. CLÉO CHEVRON, of No. 82, Boulevard Sébastopol, Paris, in the Empire of France, Mechanician, for an invention for—"Improvements in fancy or figure weaving machinery." *Letters Patent sealed.*

GRYLLS.
NEVILLE.
BROOKS.
HOLT.
3rd May 1867.

1291. HENRY WILLIAM GRYLLS, of Dalston, Civil Engineer, HENRY NEVILLE, of Mile End, Builder, JOSEPH WILLIAM BROOKS, of Victoria Park, Gentleman, and JAMES HOLT, of Hackney Road, Gentleman, all in the County of Middlesex, for an invention for—"Improved apparatus for obtaining motive-power." *Provisional protection only.*

CLARK.
3rd May 1867.

1292. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the means of locking screw nuts."—*A communication to him from abroad by Charles Bouchacourt, Civil Engineer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

KRIEGHOFF.
3rd May 1867.

1293. ERNEST KRIEGHOFF, of the City of Toronto, in the Province of Canada, for an invention for—"Improvements in spring mattresses or beds and bedsteads." *Letters Patent sealed.*

JOHNSON.
3rd May 1867.

1294. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the treatment and preparation of raw silk."—*A communication to him from abroad by Jean Jacques Müller and Joseph Schetty, of Bâle, in the Swiss Confederation.* *Provisional protection only.*

HEATON.
3rd May 1867.

1295. JOHN HEATON, of Langley Mill, in the County of Derby, Consulting Engineer, for an invention for—"Improvements in the conversion of cast iron into wrought iron, part of which improvements is also applicable to the conversion of cast iron into steel." *Letters Patent sealed.*

MILLIN.
POTTER.
3rd May 1867.

1296. GEORGE FRANCIS MILLIN, and EDWIN JOHN POTTER (trading under the style of Millin and Potter), of 52, Bow Lane, Cheapside, London, Stationers and Printers, for an invention for—"Improvements in the manufacture of parcel books, account books, and other books requiring great strength." *Provisional protection only.*

HOLMES.
3rd May 1867.

1297. JOHN HOLMES, of Wylde Green, Sutton Coldfield, in the County of Warwick, Gentleman, for an invention for—"Improvements in beer engines, which improvements are also applicable to pumps for various purposes." *Letters Patent sealed.*

THACKER.
3rd May 1867.

1298. SAMUEL THACKER, of Sneinton, in the County of Nottingham, Lace Manufacturer, for an invention for—"Improvements in the manufacture of knitted fabrics." *Letters Patent sealed.*

ROLLINS.
3rd May 1867.

1299. JOHN GUSTAVUS ROLLINS, of Old Swan Lane, in the City of London, for an invention for—"Improvements in breech-loading revolving fire-arms."—*A communication to him from abroad by Reuben Drew, of Lowell, in the State of Massachusetts, United States of America.* *Provisional protection only.*

RAMSBOTTOM.
PEARCE.
3rd May 1867.

1300. JOHN RAMSBOTTOM, of Leeds, in the County of York, Hydraulic Engineer, and THOMAS MASSEY PEARCE, of Bradford, in the said county, Yarn Agent, for an invention for—"Improvements in the construction of turbines and other hydraulic engines or apparatus for obtaining motive-power, and for measuring the flow of fluids." *Letters Patent sealed.*

CROSSLEY.
3rd May 1867.

1301. THOMAS CROSSLEY, of Bridgeport, Connecticut, in the United States of America, but at present residing at Trafalgar Square, in the City of Westminster, for an invention for—"Improvements in portable lamps or illuminators." *Provisional protection only.*

CROSSLEY.
3rd May 1867.

1302. THOMAS CROSSLEY, of Bridgeport, Connecticut, in the United States of America, but at present residing in Trafalgar Square, in the City of Westminster, for an invention for—"Improved apparatus for giving alarm in cases of fire." *Provisional protection only.*

REITZ.
3rd May 1867.

1303. CHARLES BOSCH REITZ, of No. 3, Leadenhall Street, in the City of London, for an invention for—"Improvements in meters for measuring the flow of water and other fluids, which improvements are applicable also in the construction of pumps for air, water and other fluids."—*A communication to him from abroad by Heinrich Wilhelm Schneider, at the Helder, North Holland, Mechanician.* *Letters Patent sealed.*

ALLMAN.
4th May 1867.

1304. HERBERT ALLMAN, of Ampthill Square, London, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in the construction of the boxes or bearings of the axles of railway carriages and other rolling stock." *Provisional protection only.*

RUSSELL.
4th May 1867.

1305. ROBERT RUSSELL, of Derby, in the County of Derby, Iron Founder, for an invention for—"Improvements applicable to kitchen ranges, part of which improvements is also applicable for the prevention of down-draught in other fireplaces." *Provisional protection only.*

THÈVENET.
4th May 1867.

1306. JUSTIN THÈVENET, of Mont-sur-Marchienne-lez-Charleroy, in the Kingdom of Belgium, Civil Engineer, for an invention for—"Improvements in the slide valves of steam-engines." *Complete specification; Letters Patent sealed.*

DELPERDANGE.
4th May 1867.

1307. LÉON DELPERDANGE, of Schaerbeck, near Brussels, in the Kingdom of Belgium, Manufacturer, for an invention for—"An improved method of and apparatus for laying and protecting underground telegraphic wires." *Letters Patent sealed.*

JOHNSON.
4th May 1867.

1308. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in magneto-electric signal lights and in apparatus connected therewith."—*A communication to him from abroad by Auguste Berlioz, Magneto-Electric Machine Maker, of Paris, in the Empire of France.* *Letters Patent sealed.*

LEIGH.
4th May 1867.

1309. EVAN LEIGH, of the City of Manchester, in the County of Lancaster, Mechanical Engineer, for an invention for—"Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally." *Letters Patent sealed.*

HEMSLEY.
4th May 1867.

1310. JOHN HEMSLEY, of Melbourne, in the County of Derby, Manufacturer, for an invention for—"Improvements in the manufacture of double or tubular fabrics in warp machinery." *Letters Patent sealed.*

BUNNING.
COCHRANE.
4th May 1867.

1311. THEOPHILUS WOOD BUNNING, of Newcastle-upon-Tyne, and WILLIAM COCHRANE, of Leghill House, Northumberland, for an invention for—"Improvements in apparatus used in getting coal, stone and other minerals." *Letters Patent sealed.*

BONNEVILLE.
4th May 1867.

1312. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved weeding apparatus."—*A communication from Robert Duflocq, a person resident at La Villette, near Paris, aforesaid, Gentleman. Provisional protection only.*

SHAFER.
4th May 1867.

1313. NOAH MENDAL SHAFER, of the City and County of New York, in the State of New York, in the United States of America, for an invention for—"Improvements in binders for papers and the like, which allow the whole or parts of the contents to be removed or exchanged." *Complete specification; Letters Patent sealed.*

BAKER.
4th May 1867.

1314. Lieut-Colonel JAMES BAKER, of the Army and Navy Club, Pall Mall, in the County of Middlesex, for an invention for—"Improvements in apparatus for generating electricity and applying it to produce motive-power." *Letters Patent sealed.*

BRASH.
YOUNG.
4th May 1867.

1315. PETER BRASH, of Leith, in the County of Mid-Lothian, Soap, Candle and Oil Manufacturer, and WILLIAM YOUNG, Manager of the Oil Works, Straiton, in the same County, for an invention for—"Improvements in lamps and apparatus for facilitating the burning of petroleum, paraffin oil and other hydro-carbon fluids for obtaining light and heat." *Letters Patent sealed.*

CRAMPTON.
4th May 1867.

1316. THOMAS RUSSELL CRAMPTON, of Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in machinery for preparing clay and for making bricks, tiles and similar articles." *Letters Patent sealed.*

BRADBURY.
6th May 1867.

1317. WILLIAM BRADBURY, of Prestwich, in the County of Lancaster, Clerk, for an invention for—"Improvements in stillages employed in packing and baling presses." *Letters Patent sealed.*

SMITH.
6th May 1867.

1318. BRYAN HINTON SMITH, of the firm of James Smith and Son, of Astwood Bank, in the County of Worcester, Manufacturers, for an invention for—"An improvement or improvements in papering needles or making up needles for sale." *Letters Patent sealed.*

HAENLEIN.
FISHER.
FISHER.
6th May 1867.

1319. PAUL HAENLEIN, JOSEPH FISHER, and ROWLAND GEORGE FISHER, all of No. 17, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in telegraph posts, also applicable to ships' masts and posts or supports for other purposes." *Provisional protection only.*

NADAL.
6th May 1867.

1320. JEAN NADAL, of 13, Newman Street, Oxford Street, W., for an invention for—"A new portable fountain." *Provisional protection only.*

BALL.
6th May 1867.

1321. JAMES BALL, of Hampden View, Walkley, in the Borough of Sheffield, Sheep Shear Manufacturer, for an invention for—"Improvements in the manufacture of bricklayers' and other trowels." *Letters Patent sealed.*

WINSLOW.
6th May 1867.

1322. KENELIN JOHN WINSLOW, of Belvidere, in the County of Kent, Civil Engineer, for an invention for—"Improved mechanism for the propulsion of carriages on turnpike and other like roads, by manual power." *Provisional protection only.*

TAYLOR.
POULSON.
6th May 1867.

1323. RICHARD TAYLOR, and EBENEZER POULSON, both of Shadwell, in the County of Middlesex, for an invention for—"Improvements in apparatus for securing the sheets of fore and aft sails." *Letters Patent sealed.*

CLARK.
6th May 1867.

1324. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in looms for weaving pile and other fabrics." — *A communication to him from abroad by Jean Baptiste Beau, Machine Builder, of 29, Boulevart St. Martin, Paris.*
Letters Patent sealed and specification filed by order.

SCHOFIELD.
SMITH.
6th May 1867.

1325. WILLIAM SCHOFIELD, of Oldham, in the County of Lancaster, Engineer, and EDMUND SMITH, of Rochdale, in the same County, Engineer, for an invention for—"A self-acting damper in connection with steam-boilers."
Provisional protection only.

LAKE.
6th May 1867.

1326. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in locks."—*A communication to him from abroad by James Brady, of Norwich, Connecticut, United States of America.*
Letters Patent sealed.

WILSON.
6th May 1867.

1327. GEORGE WILSON, of Sheffield, in the County of York, Engineer, for an invention for—"Improvements in the manufacture of steel tyres, rails, axles, bridge links, shafting, and other articles where uniformity in the wearing surfaces and increased durability is required." *Provisional protection only.*

WILSON.
6th May 1867.

1328. GEORGE WILSON, of the Cyclops Steel and Iron Works, Sheffield, in the County of York, for an invention for—"An improvement in the construction of buffers." *Letters Patent sealed.*

CROW.
6th May 1867.

1329. THOMAS CROW, of West Ham, in the County of Essex, Creosote Manufacturer, for an invention for—"An improved mode of and apparatus for burning hydro-carbon oils." *Letters Patent sealed.*

JOHNSON.
6th May 1867.

1330. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"An improved mode of and means for lighting gas lamps."—*A communication to him from abroad by Charles Winkler, of Paris, in the Empire of France.* *Provisional protection only.*

HALLETT.
7th May 1867.

1331. SHAKELTON EDWARD HALLETT, of the Honorable Society of Lincoln's Inn, London, and 31, Bedford Place, W.C., Esquire, Barrister-at-Law, the Director General of the Imperial Company of Fishermen, for an invention for—"An improved method of capturing fish." *Provisional protection only.*

HALLETT.
7th May 1867.

1332. SHAKELTON EDWARD HALLETT, of the Honorable Society of Lincoln's Inn, London, and 31, Bedford Place, W.C., Esquire, Barrister-at-Law, the Director General of the Imperial Company of Fishermen, for an invention for—"Improved trawl nets suitable for the capture of salmon and other fresh-water fish, in the fresh-water portion of rivers and other running waters." *Provisional protection only.*

HALLETT.
7th May 1867.

1333. SHAKELTON EDWARD HALLETT, of the Honorable Society of Lincoln's Inn, London, and 31, Bedford Place, W.C., Esquire, Barrister-at-Law, the Director General of the Imperial Company of Fishermen, for an invention for—"An improved method of capturing salmon and other fish in rivers and inland waters."
Provisional protection only.

CAVELL.
7th May 1867.

1334. JOHN SCOTT CAVELL, of Gray's Inn Square, in the County of Middlesex, for an invention for—"Improvements in the construction of automaton figures or toys." *Letters Patent sealed.*

BOURDON.
7th May 1867.

1335. EUGÈNE BOURDON, Engineer, of 36, Rue de Malte, Paris, in the Empire of France, for an invention for—"Improvements in valves for regulating the flow of liquids, gases and other elastic fluids." *Letters Patent sealed.*

HARTHAN.
7th May 1867.

1336. GEORGE HARTHAN, of Congleton, in the County of Chester, Silk Throwster, for an invention for—"An improved combination of mechanism for communicating motion for any purpose, whereby human power can be exercised to great advantage."
Provisional protection only.

BOOTH.
7th May 1867.

1337. JOHN BOOTH, of Oldham, in the County of Lancaster, for an invention for—"Certain improvements in receptacles for containing and emitting oil or lubricating liquids." *Provisional protection only.*

MARSDEN.
BROMLEY.
7th May 1867.

1338. ROBERT MARSDEN, of Horwich, in the County of Lancaster, Engineer, and URIAS BROMLEY, of Ardwick, in the same County, for an invention for—"An improved railway break." *Letters Patent sealed.*

GREENER. 7th May 1867.

1339. WILLIAM WELLINGTON GREENER, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

GILMAN. 7th May 1867.

1340. ALBERT HUSTON GILMAN, of the State of Massachusetts, of the United States of America, for an invention for—"Certain new and useful improvements in machinery for making roving and for spinning such into yarn." *Complete specification; Letters Patent sealed.*

FAUCHER. 7th May 1867.

1341. EDMOND FAUCHER, of Mantes, in the Empire of France, for an invention for —"Improvements in machinery or apparatus for bending or forming wooden hoops." *Provisional protection only.*

BLYTHE. 7th May 1867.

1342. JOHN BENNINGTON BLYTHE, of London Street, in the City of London, Merchant, for an invention of—"Improvements in coating and ornamenting metallic or other surfaces."—*A communication to him from abroad by Edouard Dodé, of Wailly, in the Empire of France.* *Provisional protection only.*

SMITH. 7th May 1867.

1343. ROBERT SMITH, of Strichen, in the County of Aberdeen, North Britain, Saddler, for an invention for—"Improvements in the manufacture of collars for horses and other animals, and in apparatus to be used in the said manufacture." *Letters Patent sealed.*

BURRELL. 7th May 1867.

1344. CHARLES BURRELL, of St. Nicholas Works, Thetford, in the County of Norfolk, for an invention for—"Improvements in machinery for drawing and dressing seeds." *Letters Patent sealed.*

NEWTON. 7th May 1867.

1345. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in explosive compounds and in the means of igniting the same."—*A communication to him from abroad by Alfred Nobel, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

LAKE. 7th May 1867.

1346. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved machine for scouring or cleaning grain."—*A communication to him from abroad by Peter T. Elting, of Buffalo, New York, United States of America.* *Letters Patent sealed.*

KRAUSS. 7th May 1867.

1347. GEORGE KRAUSS, of Munich, in the Kingdom of Bavaria, Germany, for an invention for—"An improved system of tenders for locomotives." *Provisional protection only.*

WHEELER. 7th May 1867.

1348. NORMAN WILLIS WHEELER, of the City of Brooklyn, in the County of Kings, in the State of New York, in the United States of America, for an invention for—"Improvements in hydraulic valve gear for steam and analogous engines." *Complete specification; Letters Patent sealed.*

WHEELER. 7th May 1867.

1349. NORMAN WILLIS WHEELER, of the City of Brooklyn, in the County of Kings, in the State of New York, in the United States of America, for an invention for —"Improvements in skylights and ventilators for steam vessels, part of which is applicable to other structures. *Complete specification; Letters Patent sealed.*

WHEELER. 7th May 1867.

1350. NORMAN WILLIS WHEELER, of the City of Brooklyn, in the County of Kings, in the State of New York, in the United States of America, for an invention for—"Improvements in the construction and packing of slide valves and adjacent parts for steam and other engines." *Complete specification; Letters Patent sealed.*

WHEELER. 7th May 1867.

1351. NORMAN WILLIS WHEELER, of the City of Brooklyn, in the County of Kings, in the State of New York, in the United States of America, for an invention for—"Improvements in apparatus for introducing and controlling the introduction of fluids to surface condensers of steam-engines." *Complete specification; Letters Patent sealed.*

CROCKATT. 7th May 1867.

1352. JAMES CROCKATT, of Dundee, in the County of Forfar, North Britain, for an invention for—"Improvements in securing the handles of doors and in the means employed therefor." *Provisional protection only.*

SAXBY. 7th May 1867.

1353. HENRY JOHN SAXBY, of John Street, Woolwich, in the County of Kent, for an invention for—'Improvements in locks and catches or staples connected therewith." *Provisional protection only.*

FAIRLEY. FAIRLEY. 8th May 1867.

1354. JAMES FAIRLEY, and ALFRED FAIRLEY, both of Birmingham, in the County of Warwick, Birmingham Agents for the Brade's Iron, Steel, and Edge Tool Manufacturers, for an invention for—"Certain improvements in the manufacture of plantation and other hoes, and which said improvements are also applicable to the manufacture of other implements and tools." *Letters Patent sealed.*

LAYTON. 8th May 1867.

1355. CHARLES LAYTON, of Liverpool, in the County of Lancaster, Commercial Traveller, for an invention for—"Certain improvements in the means of casting or producing parts of steam, gas and water fittings, as also parts of lamps and other articles." *Provisional protection not granted.*

ABEL. 8th May 1867.

1356. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases."—*A communication to him from abroad by Nicholas Lebedeff, Mining Engineer, of St. Petersburg, in the Empire of Russia.*
Provisional protection only.

GASKELL. 8th May 1867.

1357. JAMES GASKELL, of Blackburn, in the County of Lancaster, for an invention for—"Improved machinery or apparatus for building cops in winding machines." *Letters Patent sealed.*

LAKE. 8th May 1867.

1358. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved fastening for bands or hoops for baling cotton or other substances."—*A communication to him from abroad by George Newton Beard, of St. Louis, Missouri, United States of America. Letters Patent sealed.*

NIXON. WINTERBOTTOM. 8th May 1867.

1359. JOSEPH NIXON, and JABEZ WINTERBOTTOM, of Sheffield, in the County of York, Cutlery Manufacturers, for an invention for—"Improved machinery for piercing and drilling tangs and scales for table knives and forks, table and butchers' steels, and butchers' knives. *Letters Patent sealed.*

WESTON 8th May 1867.

1360. THOMAS ALDRIDGE WESTON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in ratchet levers for actuating drills, screw drivers, watch keys and other like instruments."
Letters Patent sealed; specification filed by order.

MAYALL. 8th May 1867.

1361. THOMAS JEFFERSON MAYALL, of 20, Bouverie Street, in the City of London, for an invention for—"Improvements in means or apparatus employed in printing." *Letters Patent sealed.*

COTTAM. 8th May 1867.

1362. HENRY RICHARD COTTAM, of St. Pancras Iron Works, Old St. Pancras Road, in the County of Middlesex, for an invention for—"Improvements in bedsteads." *Letters Patent sealed.*

DONISTHORPE. 8th May 1867.

1363. GEORGE EDMUND DONISTHORPE, of Leeds, in the County of York, Top and Noil Manufacturer, for an invention for—"Improvements in machinery for combing wool and other fibres." *Letters Patent sealed.*

COTTAM. 8th May 1867.

1364. HENRY RICHARD COTTAM, of St. Pancras Iron Works, Old St. Pancras Road, in the County of Middlesex, for an invention for—"Improvements in ornamental balusters and balustrades, and other ornamental rails." *Letters Patent sealed.*

WOOD. WOOD. 8th May 1867.

1365. ROWLAND WOOD, and AUSTIN WOOD, both of Parkfield Street, Islington, in the County of Middlesex, and Gough Square, in the City of London, Type Founders, for an invention for—"Improvements in the method of and apparatus for treating or pressing paper, pasteboard and similar materials, after printing on the same." *Provisional protection only.*

WORSSAM. 9th May 1867.

1366. SAMUEL WILLIAM WORSSAM, junior, of King's Road, Chelsea, in the County of Middlesex, for an invention for—"Improvements in machinery or apparatus for working wood." *Letters Patent sealed.*

FOURNIER. 9th May 1867.

1367. ALBERT FOURNIER, of La Rochelle, in the Empire of France, Notary, for an invention for—"Improvements in the manufacture of small model or toy boats or ships from paper or cardboard." *Provisional protection only.*

CAIL. 9th May 1867.

1368. GEORGE HENRY CAIL, of Pembroke Square, Southampton, in the County of Hants, for an invention for—"An improved method of preventing the explosion of steam boilers and of promoting the generation of dry steam."
Provisional protection only.

WESTON. 9th May 1867. **1369.** THOMAS ALDRIDGE WESTON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in springs for buffers and bearings and for other purposes. *Letters Patent sealed; specification filed by order.*

SIMS. 9th May 1867. **1370.** GEORGE SIMS, of 4, Queen Elizabeth Street, Tooley Street, in the County of Surrey, for an invention for—"A new mode or method of making all kinds of waistcoats reversible. *Provisional protection only.*

BOWDEN. 9th May 1867. **1371.** JOHN BOWDEN, of Preston, in the County of Lancaster, Surveyor, for an invention for—"An improved 'bib,' 'stop' or water-closet tap or cock." *Provisional protection only.*

FLEMING. 9th May 1867. **1372.** MATTHEW FLEMING, of the firm of Dick and Fleming, Spirit Merchants and Bottlers, of Dundee, in the County of Forfar, North Britain, for an invention for—"Improvements in washing and cleaning bottles, and in the apparatus employed therefor." *Provisional protection only.*

WESTON. 9th May 1867. **1373.** THOMAS ALDRIDGE WESTON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in friction coupling breaks applicable to hoisting apparatus and other purposes. *Letters Patent sealed; specification filed by order.*

BROWN. 9th May 1867. **1374.** THOMAS BROWN, of No. 96, Newgate Street, in the City of London, Civil Engineer, for an invention for—"An improved egg beater, the same being applicable for mixing liquors and for other like purposes."—*A communication to him from abroad by Howard Tilden, of Boston, Massachusetts, United States of America.* *Provisional protection only.*

BROWN. 9th May 1867. **1375.** THOMAS BROWN, of No. 96, Newgate Street, in the City of London, Civil Engineer, for an invention for—"An improved coffee pot."—*A communication to him from abroad by Howard Tilden, of Boston, Massachusetts, United States of America.* *Provisional protection only.*

HERCE. 9th May 1867. **1376.** AUGUSTE HERCE, of No. 18, Boulevard Bonne-Nouvelle, Paris, in the Empire of France, Piano Manufacturer, for an invention for—"Certain improvements in pianos." *Letters Patent sealed.*

NEWTON. 9th May 1867. **1377.** WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the welding of iron and steel, and the flux used therefor."—*A communication to him from abroad by John P. Price and Frank K. Hipple, both of Philadelphia, Pennsylvania, in the United States of America.* *Letters Patent sealed.*

NEWTON. 9th May 1867. **1378.** WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of lubricating the stuffing boxes of steam-engines and pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore."—*A communication to him from abroad by Abraham Littlewood, Francis W. Bloodgood, and Henry Dirks Ostermoor, all of New York City, in the United States of America.* *Provisional protection only.*

ANDREW. 9th May 1867. **1379.** RATCLIFFE ANDREW, of the California Works, Derby, in the County of Derby, Engineer, for an invention for—"Improvements in machinery or apparatus for communicating between passengers in railway carriages and the guard and driver of railway trains, and improved self-acting breaks applicable also to other carriages or vehicles." *Letters Patent sealed.*

RITCHIE. 9th May 1867. **1380.** CHARLES RITCHIE, of Upper Tulse Hill, Brixton, in the County of Surrey, for an invention for—"Improvements in casks and in apparatus for storing and drawing off liquids and semi-fluid matters." *Provisional protection only.*

JEFFRIES. 9th May 1867. **1381.** GEORGE JEFFRIES, of Orford Hill, Norwich, in the County of Norfolk, for an invention for—"Improvements in apparatus for turning or closing central fire sporting cartridges." *Letters Patent sealed.*

MCKENZIE. 10th May 1867. **1382.** GEORGE MCKENZIE, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in the manufacture of illuminating gas. *Letters Patent sealed.*

DŒRING. 10th May 1867.

1383. FREDERICK BERNARD DŒRING, of Duke Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in rotary engines."—*A communication to him from abroad by Friedrich August Vogelsang, of Sprockhœvel, in Westphalia, in the Kingdom of Prussia, Consulting Engineer.*

Provisional protection only.

BRACEWELL. PICKUP. LUND. 10th May 1867.

1384. WILLIAM BRACEWELL, WILLIAN PICKUP, and BENJAMIN LUND, all of Burnley, in the County of Lancaster, Engineers, for an invention for—"Improvements in valves for steam and other fluids." *Letters Patent sealed.*

MELLARD. 10th May 1867.

1385. RALPH MELLARD, of Trent Foundry, Rugeley, in the County of Stafford, Engineer, for an invention for—"Improvements in the construction of machinery for preparing and mixing food for pigs and other animals." *Letters Patent sealed.*

NORMAN. HAY. 10th May 1867.

1386. JOHN NORMAN, Engineer, and WILLIAM HAY, Miller, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in the manufacture of flour." *Letters Patent sealed.*

COOPER. 10th May 1867.

1387. ALLAN COOPER, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of single and double box pickers for looms." *Letters Patent sealed.*

JONES. 10th May 1867.

1388. CHARLES JONES, of the firm of John Jones and Sons, of William Street Iron Works, Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in coal mining machinery." *Provisional protection only.*

JOHNSON. GILES. 10th May 1867.

1389. JAMES JOHNSON, of Pendleton, in the County of Lancaster, Manufacturer, and ALFRED GILES, of Manchester, Engineer, for an invention for—"Improvements in machines for drying yarns, paper and fabrics." *Letters Patent sealed.*

TRASK. 10th May 1867.

1390. CHARLES HOOPER TRASK, of Boston, Massachusetts, in the United States of America, but at present residing in Jeffrey's Square, St. Mary Axe, in the City of London, for an invention for—"Improvements in governors for steam and other engines."—*A communication to him from abroad by Daniel F. Mosman, of Cambridge, in the State of Massachusetts, United States of America.* *Provisional protection only.*

COMBE. 10th May 1867.

1391. JOHN COMBE, of Starbeck, in the County of York, Engineer, for an invention for—"Improvements in machinery for winding cops and warping from cops."

Letters Patent sealed.

SMYTH. 10th May 1867.

1392. WILLIAM SMYTH, of Dartons Castlederg, County Tyrone, Ireland, at present residing at Cottage Green, Camberwell, in the County of Surrey, for an invention for—"Improvements in machinery or apparatus for navigating the air."

Letters Patent sealed.

CLARK. 10th May 1867.

1393. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in brick-making machines."—*A communication to him from abroad by John Scott Meredith and John Hanson Mitchell, both of Baltimore, in the State of Maryland, United States of America.* *Letters Patent sealed and specification filed by order.*

MARLOW. 11th May 1867.

1394. CHARLES MARLOW, of Salford, in the County of Lancaster, Clock Case Manufacturer, for an invention for—"Improvements in cases for clocks and in the method of manufacturing the same." *Provisional protection only.*

KNIGHT. BASTAND. 11th May 1867.

1395. JOHN ADAMS KNIGHT, and CHARLES BASTAND, of 42, Hanway Street, Oxford Street, London, Engineers and Sewing-Machine Manufacturers, for an invention for—"An improved self-acting and ventilating nose or feed bag for horses."—*Partly a communication to them from abroad by Nathaniel Knight, Esquire, of Auburn, Maine, United States of America, and partly their own invention.*

Provisional protection only.

REILLY. 11th May 1867.

1396. JAMES REILLY, of the New Globe Mahogany Chair and Cabinet Works, Barrack Street, Hulme, Manchester, in the County of Lancaster, for an invention for—"An improved system of mechanical aids worked by hand or motive-power, for enabling the arts of swimming, floating and diving to be rapidly acquired."

Letters Patent sealed.

WALKER. 11th May 1867.

1397. JOHN WALKER, Ironmonger, of Sheffield, in the County of York, for an invention for—"Improvements in the construction of the standards and other parts of scales and beams for weighing purposes, and for the mode of connecting the same." *Letters Patent sealed.*

RUSSELL. 11th May 1867.

1398. GEORGE FITZJAMES RUSSELL, of Piccadilly, in the County of Middlesex, Esquire, for an invention for—"Improvements in rotary engines." *Provisional protection only.*

BROWNING. 11th May 1867.

1399. GEORGE BROWNING, of Cheapside, in the City of London, Mechanician, for an invention for—"Improvements in the construction of button-hole sewing-machines." *Letters Patent sealed.*

PIDDINGTON. 11th May 1867.

1400. JOHN PIDDINGTON, of Gracechurch Street, in the City of London, for an invention for—"Improvements in boring gun barrels and ordnance, and in apparatus used therein."—*A communication to him from abroad by Joseph Jaspard, of Liège, in the Kingdom of Belgium, Mechanician.* *Letters Patent sealed.*

STEVEN. 11th May 1867.

1401. JOHN STEVEN, of the firm of Steven and Struthers, of the City of Glasgow, in the County of Lanark, North Britain, Bell and Brass Founders, for an invention for—"Improvements in gauges for steam-boilers, and in the construction and application of taps, cocks or valves for or to such gauges." *Provisional protection only.*

NELSON. 11th May 1867.

1402. THOMAS NELSON, of Hope Park, Edinburgh, and 29, Paternoster Row, in the City of London, for an invention for—"Improvements in the manufacture of cards, tablets and other articles, from which marks made with water colors, ink or pencil may be repeatedly erased by moisture, without injury to the surface." *Letters Patent sealed.*

CLARK. 11th May 1867.

1403. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in bleaching textile materials or fibres, more especially wood pulp, for the manufacture of paper and pasteboard."—*A communication to him from abroad by Jean Bernard Biron, Merchant, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed and specification filed by order.*

WATKINS. 11th May 1867.

1404. JOHN WATKINS, of Balsall Heath, in the County of Worcester, Machinist, for an invention for—"Improvements in axles for carriages." *Letters Patent sealed.*

DALBY. CONSTANTINE. 11th May 1867.

1405. JOSEPH WILCOCK DALBY, and PICKLES CONSTANTINE, both of Bradford, in the County of York, Manufacturers, for an invention for—"An improved species of yarns and apparatus to be applied in the production thereof." *Provisional protection only.*

LAKE. 11th May 1867.

1406. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved caster for tables, chairs and other articles of furniture."—*A communication to him from abroad by Edward Ward Wilder and Simon Gardner Cheever, both of Boston, Massachusetts, United States of America."* *Provisional protection only.*

LAKE. 11th May 1867.

1407. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of constructing metal cocks, faucets and other similar articles."—*A communication to him from abroad by William Westlake, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

NEUMEŸER. 13th May 1867.

1408. GUSTAV ADOLPH NEUMEŸER, of Döbitz, in the Kingdom of Prussia, for an invention for—"Improvements in gunpowder for mining purposes." *Letters Patent sealed.*

ALLEYNE. 13th May 1867.

1409. JOHN GAY NEWTON ALLEYNE, of the Butterley Iron Works, Alfreton, in the County of Derby, for an invention for—"Improvements in puddling furnaces, also applicable to other furnaces of similar construction." *Letters Patent sealed.*

PADBURY. 13th May 1867.

1410. ROBERT HENRY PADBURY, of Shoreditch, in the County of Middlesex, Sewing Machine Manufacturer, for an invention for—"A new or improved shuttle for sewing machines." *Provisional protection only.*

LUNGE.
13th May 1867.

1411. GEORGE LUNGE, of South Shields, in the County of Durham, Doctor of Philosophy, for an invention for—"Improvements in the preparation of ores, metals and other substances for working in furnaces." *Provisional protection only.*

BONNEVILLE.
13th May 1867.

1412. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for —"An improved washing powder."—*A communication from Louis Lacalm and Barthelemy Adolphe Guyot, Manufacturers, two persons resident at Aubin, in the Empire of France.* *Letters Patent sealed.*

LEETCH.
13th May 1867.

1413. JAMES LEETCH, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in cartridge holders more especially adapted for shooting coats and belts." *Provisional protection only.*

EASTWOOD.
13th May 1867.

1414. CHARLES EASTWOOD, of Ravensthorpe, in the County of York, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

CORMACK.
13th May 1867.

1415. WILLIAM CORMACK, of Commercial Road, in the County of Middlesex, Chemist, for an invention for — "Improvements in means and apparatus for effecting the revivification of animal and vegetable charcoal." *Provisional protection only.*

DE BOURRAN.
13th May 1867.

1416. WILLIAM EDMOND DE BOURRAN, of Number Eight, Rue Hustin, in the City of Bordeaux and Empire of France, for an invention for—"Improvements in evaporators for concentrating saccharine fluids." *Provisional protection only.*

BUTLER.
13th May 1867.

1417. JAMES WILLIAM BUTLER, of the Railway Office, Dunmow, in the County of Essex, for an invention for—"Improvements in the construction of armour-plated ships and batteries." *Letters Patent sealed.*

ROGERS.
WILSON.
13th May 1867.

1418. MARTIN DADD ROGERS, of East India Road, Poplar, and JOSEPH WILSON, of Wade Street, Poplar, both in the County of Middlesex, for an invention for—"An improved fire-escape, parts of which are applicable to the ventilation of buildings and the extinguishing of fire therein." *Provisional protection only.*

FIELD.
13th May 1867.

1419. EDWARD FIELD, of Chandos Chambers, Adelphi, in the City of Westminster, Consulting Engineer, for an invention for—"Improvements in apparatus for generating and condensing steam." *Letters Patent sealed.*

CLARK.
13th May 1867.

1420. JOHN CLARK, of 3, Orchard Street, Paddington, in the County of Middlesex, Engineer, for an invention for—"Improvements in railway breaks and in the means of applying the same." *Letters Patent sealed.*

SODO.
13th May 1867.

1421. WILLIAM SODO, of the Pelican Beer House, No. 21, George Street, Wellington Street, Stepney, in the County of Middlesex, Beer House Keeper, for an invention for—"An improved method of and apparatus for drawing off and refining liquors or liquids of any kind." *Provisional protection only.*

COLLES.
14th May 1867.

1422. ALEXANDER HAMILTON COLLES, of Manchester, in the County of Lancaster, for an invention for—"Improvements in apparatus for signalling between passengers, guards and engine drivers upon railways." *Letters Patent sealed.*

RANDOLPH.
14th May 1867.

1423. CHARLES RANDOLPH, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in apparatus for propelling vessels." *Letters Patent sealed.*

BARRETT.
MACKENZIE.
14th May 1867.

1424. BENJAMIN BARRETT, of Birmingham, in the County of Warwick, Silver and Electro-plate Manufacturer, and HENRY MACKENZIE, of Birmingham, aforesaid, Silver and Electro-plate Manufacturer, for an invention for—"Improvements in or additions to egg boilers for the table." *Letters Patent sealed.*

BASTIN.
BAUM.
14th May 1867.

1425. JACQUES JOSEPH BASTIN, and LOUIS ANATOLE BAUM, of No. 5, Rue Marty, at Charenton le Pont, Paris, France, for—"An invention for the use of all kind of industry, and called the 'Perpetual movement.'" *Provisional protection* NOT *granted.*

JENNINGS.
14th May 1867.

1426. JOSIAH GEORGE JENNINGS, of Palace Road, Lambeth, in the County of Surrey, Sanitary Engineer, for an invention for—"Improvements in waterclosets and sinks, and in apparatus for supplying water thereto and conducting it therefrom, parts of which apparatus are applicable to other purposes." *Letters Patent sealed.*

CLARK.
14th May 1867.

1427. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the means of raising liquids and in apparatus for the same."—*A communication to him from abroad by Pierre Léon Margot, junior, of 29, Boulevart St. Martin, Paris, Vat Maker.*

Letters Patent sealed.

WALKER.
14th May 1867.

1428. EDMUND WALKER, of London Street, in the City of London, Manufacturer, for an invention for—"Improvements in windlasses." *Letters Patent sealed.*

NEWTON.
14th May 1867.

1429. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in axle-boxes and bearings."—*A communication to him from abroad by Patrick Sarsfield Devlan, of the City and State of New Jersey, United States of America.* *Letters Patent sealed.*

ELLISON.
15th May 1867.

1430. JAMES CHARLES ELLISON, of Shelf, near Halifax, in the County of York, for an invention for—"A machine or apparatus for removing the card boards, metallic plates or other substances, from the folds of fabrics, used in the process of pressing." *Letters Patent sealed.*

BRAZIL.
GRIME.
15th May 1867.

1431. CLARANCE BRAZIL, of Chorley, in the County of Lancaster, Manufacturer, and ROBERT GRIME, of Preston, in the said County, Manufacturer, for an invention for—"Improved arrangements and apparatus for wetting and drying wefts or yarns to prepare them for weaving." *Letters Patent sealed.*

BAILDON.
15th May 1867.

1432. HENRY CRAVEN BAILDON, of Edinburgh, Scotland, Chemist, for an invention for—"Improvements in 'nature printing' from plants, leaves or other natural objects." *Letters Patent sealed.*

SMITH.
15th May 1867.

1433. ERNEST SMITH, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in obtaining violet coloring matters." *Letters Patent sealed.*

BONNEY.
15th May 1867.

1434. FRANCIS BONNEY, of Kensington, in the County of Middlesex, for an invention for—"Improvements in the construction of ships and boats."

Provisional protection only.

PERRY.
15th May 1867.

1435. CHARLES PERRY, of the firm of John Perry, of Shipley, near Bradford, in the County of York, Manufacturer of Wool-combing Machines, for an invention for—"An improved machine for flattening hackle pins or comb teeth employed in machines for combing wool or other fibrous substances." *Letters Patent sealed.*

CLARKE.
WALKER.
15th May 1867.

1436. WILLIAM CLARKE, of Gateshead, in the County of Durham, and EDMUND WALKER, of Poplar, in the County of Middlesex, for an invention for—"Improvements in apparatus for raising or moving heavy weights." *Letters Patent sealed.*

TATE.
15th May 1867.

1437. WILLIAM DRAKE TATE, of 14, Cloudesley Square, Islington, for an invention for—"Improvements in apparatus for stopping bottles and other vessels."

Provisional protection only.

JOHNSON.
15th May 1867.

1438. JOB JOHNSON, of Brooklyn, in the State of New York, United States of America, for an invention for—"Improvements in submarine tongs for gathering oysters and other articles." *Letters Patent sealed.*

NIMMO.
15th May 1867.

1439. GEORGE NIMMO, of Jersey City, in the State of New Jersey, United States of America, for an invention for—"An improvement in metal wheels for railroad cars and other vehicles." *Letters Patent sealed.*

NEWTON.
15th May 1867.

1440. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in billiard tables."—*A communication to him from abroad by Hugh W. Collender, of the City and State of New York, United States of America.*

Letters Patent sealed.

COLES.
JAQUES.
FANSHAWE.
15th May 1867.

1441. GEORGE COLES, of Gresham Street, West, in the City of London, Merchant, JAMES ARCHIBALD JAQUES, of Tottenham, in the County of Middlesex, Chemist, and JOHN AMERICUS FANSHAWE, of the same place, Engineer, for an invention for—"Improvements in wheeled carriages and in the construction of wheels and springs for such carriages and other vehicles." *Letters Patent sealed.*

COLES. JAQUES. FANSHAWE. 15th May 1867.

1442. GEORGE COLES, of Gresham Street, West, in the City of London, Merchant, JAMES ARCHIBALD JAQUES, of Tottenham, in the County of Middlesex, Chemist, and JOHN AMERICUS FANSHAWE, of the same place, Engineer, for an invention for —"Improvements applicable to the permanent way of railways."
Letters Patent sealed.

EDWARDS. 15th May 1867.

1443. EDMUND EDWARDS, of 22, Buckingham Street, Adelphi, London, for an invention for—"Improvements in apparatus for treating mineral substances."
Letters Patent sealed.

HARPER. 16th May 1867.

1444. JOHN HARPER, of Clerkenwell, in the County of Middlesex, Engineer, for an invention for—"Improvements in single cylinder printing machines."
Provisional protection only.

DE BERENGER. 16th May 1867.

1445. PHILIP ARTHUR DE BERENGER, of Maida Hill, in the County of Middlesex, for an invention for—"Improvements in kilns for burning limestone, cement and other materials." *Provisional protection only.*

ROBERT. 16th May 1867.

1446. CHARLES ROBERT, of 31, Rue Souverain Pont, Liége, in the Kingdom of Belgium, for an invention for—"Improvements in breech-loading fire-arms."
Provisional protection only.

NAPIER. 16th May 1867.

1447. JAMES MURDOCH NAPIER, of York Road, Lambeth, Engineer, for an invention for—"Improvements in intaglio plate printing machinery."
Letters Patent sealed.

BOUSFIELD. 16th May 1867.

1448. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"A method of manufacturing illuminating gases."—*A communication from abroad by William Elmer, a person resident at the City, County and State of New York, United States of America.*
Complete specification; Letters Patent sealed.

JOHNSON. 16th May 1867.

1449. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms."—*A communication from abroad by William Wheeler Hubbell, of Philadelphia, Pennsylvania, United States of America.*
Complete specification; Letters Patent sealed.

HARRINGTON. 16th May 1867.

1450. GEORGE FELLOWS HARRINGTON, of Ryde, in the Isle of Wight, for an invention for—"Improvements in the construction of marine baths."
Provisional protection only.

BROOMAN. 16th May 1867.

1451. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by John Nathaniel Tarbox, of Hamilton, Canada West.* *Letters Patent sealed.*

GRIFFITHS. 16th May 1867.

1452. JAMES GRIFFITHS, of Wickham Market, in the County of Suffolk, for an invention for—"A new or improved combined apparatus for sowing seeds, hoeing, raking and other horticultural purposes." *Provisional protection only.*

SADLER. 16th May 1867.

1453. JOHN SADLER, of Birmingham, in the County of Warwick, Hinge Manufacturer, for an invention for—"An improved nail-cutting machine."
Provisional protection only.

STANLEY. 16th May 1867.

1454. JOHN MARTIN STANLEY, of Chancery Lane, in the County of Middlesex, Ironfounder, for an invention for—"Improvements in producing and increasing combustion in blast and other furnaces, also for generating steam and for other similar or analagous purposes." *Letters Patent sealed.*

DENIS. 17th May 1867.

1455. JULIEN DENIS, of Stamford Street, Blackfriars, in the County of Surrey, Merchant, for an invention for—"Improvements in the treatment and preparation of fibrous substances or vegetable matters as pulp for the manufacture of paper, and in apparatus for the same." *Letters Patent sealed.*

WARREN. 17th May 1867.

1456. FREDERIC PELHAM WARREN, of East Court, Cosham, in the County of Hants, Commander in the Royal Navy, for an invention for—"Improvements in tobacco pipes." *Letters Patent sealed.*

PEEL.
17th May 1867.

1457. HENRY PEEL, of the firm of Bairstow Brothers and Company, of Ovenden, near Halifax, in the County of York, Machine Makers and Ironfounders, for an invention for—"Improvements in looms for weaving lastings and serdge-de-berries, applicable also for weaving other fabrics." *Letters Patent sealed.*

PARSONS.
17th May 1867.

1458. PERCEVAL MOSES PARSONS, of Blackheath, in the County of Kent, Civil Engineer, for an invention for—"Improvements in the manufacture of artificial granite and other artificial bricks and blocks suitable for buildings, engineering structures, pavements and other similar purposes."—*A communication to him from abroad by Pierre Rodolphe Pozzi, of Bordeaux, France.* *Provisional protection only.*

ANGOT.
17th May 1867.

1459. AUGUSTINE ANGOT, of Paris, 15, Passage des Petites Ecuries, in the Empire of France, wife of Felix Angot, of same address, for an invention for—"An improved spring petticoat." *Letters Patent sealed.*

HOLLINGSWORTH
17th May 1867.

1460. HENRY HOLLINGSWORTH, of Stroud, in the County of Kent, for an invention for—"An improved shoe for piles." *Provisional protection only.*

DOWIE.
17th May 1867.

1461. ANDREW LINMERE DOWIE, of Glasgow, in the County of Lanark, North Britain, Merchant, for an invention for—"Improvements in treating iron to obtain metallic compounds for various uses." *Letters Patent sealed.*

SMITH.
17th May 1867.

1462. JOHN SMITH, of Little Moorfields, in the City of London, Sewing-Machine Maker, for an invention for—"Improvements in driving sewing-machines and in apparatus employed therefor." *Provisional protection only.*

LAKE.
17th May 1867.

1463. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in water gauges for steam-boilers."—*A communication to him from abroad by Ambrose George Fell, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

LAKE.
17th May 1867.

1464. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the manufacture of white lead."—*A communication to him from abroad by Thomas Mara Fell and Ambrose George Fell, both of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

LAKE.
17th May 1867.

1465. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of producing chloride or oxychloride of lead, and treating the same for manufacturing white lead."—*A communication to him from abroad by Thomas Mara Fell and Ambrose George Fell, both of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

BERNHARDT.
17th May 1867.

1466. GEORGE BERNHARDT, of the firm of J. C. Milns and Co., Radcliffe, in the County of Lancaster, Spinners and Manufacturers, for an invention for—"Improvements in or applicable to throstle and doubling frames and machines of like character for spinning, twisting and doubling fibrous materials." *Letters Patent sealed.*

REGAN.
17th May 1867.

1467. SIMON REGAN, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in marine and land boilers and their furnaces, and also other furnaces used for the manufacture of iron and other purposes." *Letters Patent sealed.*

WEBB.
17th May 1867.

1468. EDWARD WEBB, of the City of Worcester, in the County of Worcester, Hair Cloth Manufacturer, for an invention for—"Improvements in looms for weaving hair cloth and other analogous fabrics." *Letters Pa'ent sealed.*

NEWTON.
17th May 1867.

1469. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for lowering, detaching and picking up ships' boats."—*A communication to him from abroad by Robert Creuzbaur, of the City and State of New York, United States of America.* *Letters Patent sealed.*

BROOMAN.
17th May 1867.

1470. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in reckoning, counting or calculating apparatus."—*A communication to him from abroad by Charles Denis Labrousse, of Paris, France.* *Provisional protection only.*

CLARK.
17th May 1867.

1471. JOSIAH LATIMER CLARK, of 5, Westminster Chambers, Victoria Street, in the County of Middlesex, for an invention for—"Improvements in apparatus for communicating between the passengers, guards and engine drivers of a railway train."
Letters Patent sealed.

RICHARDSON.
18th May 1867.

1472. THOMAS RICHARDSON, of the Town and County of Newcastle-on-Tyne, for an invention for—"Improvements in the extraction of oils from vegetable substances."
Provisional protection only.

SLOAN.
18th May 1867.

1473. JAMES SLOAN, of Liverpool, in the County of Lancaster, Painter and Plumber, for an invention for—"Improvements in the construction of ships' water-closets."
Provisional protection only.

BLAND.
BLAND.
BREVETOR.
18th May 1867.

1474. JAMES THEODORE BLAND, and EDWIN JOHN BLAND, of 15, Broadway, London Fields, Hackney, Plumbers, and THOMAS BREVETOR, of No. 9, Ash Grove, Hackney, Gentleman, for an invention for—"An improved apparatus for more effectually regulating the supply of water or other fluids to cisterns or other receptacles, and for economizing the trouble and expense connected therewith."
Letters Patent sealed.

BUTTON.
18th May 1867.

1475. CHARLES POMEROY BUTTON, of Nos. 142 and 143, Cheapside, in the City of London, Merchant, for an invention for—"Improvements in hernia trusses, abdominal supporters and surgical bands."—*A communication to him from abroad by William Pomeroy, of No. 553, Broadway, in the City and State of New York, United States of America.*
Provisional protection only.

SHEIL.
18th May 1867.

1476. BERNARDO SHEIL, of Brompton, in the County of Middlesex, Esquire, for an invention for—"Improved paving for roads and ways."
Provisional protection only.

BRANDON.
18th May 1867.

1477. ALEXANDER HORACE BRANDON, of 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"Improvements in machinery for washing wool, the said improvements being also applicable to other purposes."—*A communication to him from Jonathan Holden, of Reims, in the Empire of France, Manufacturer.*
Letters Patent sealed.

DUFRENÉ.
18th May 1867.

1478. HECTOR AUGUSTE DUFRENÉ, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, and 4, South Street, Finsbury, London, Civil Engineer, for an invention for—"An apparatus for transferring heat from one current of gas to another."—*A communication from Monsieur Charles Fleurot, a person resident at Val d'Ajol, in the Empire of France.*
Provisional protection only.

DIXON.
18th May 1867.

1479. CHARLES WILLIAM DIXON, of Wickham Market, in the County of Suffolk, Engineer, for an invention for—"Improvements in slide-valves."
Provisional protection NOT *granted.*

SMITH.
IBBOTSON.
18th May 1867.

1480. JOHN SMITH, and JOHN LAWSON IBBOTSON, both of Barrow-in-Furness, in the County of Lancaster, for an invention for—"Improvements in raising and lowering revolving shutters."
Provisional protection only.

WHITE.
18th May 1867.

1481. JOHN WHITE, of Cheapside, in the City of London, for an invention for—"An improved binder for sewing-machines."
Provisional protection only.

HALLETT.
HALLETT.
18th May 1867.

1482. EDWIN OWEN HALLETT, and WILLIAM TAMSETT HALLETT, both of Weymouth, in the County of Dorset, for an invention for—"An improved book-rest."
Provisional protection only.

HAYNES.
18th May 1867.

1483. GEORGE HAYNES, of Ellesmere, in the County of Salop, Sawyer, for an invention for—"An improved apparatus for cleaning or brushing boots and shoes."
Provisional protection only.

GEDGE.
18th May 1867.

1484. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"A novel system of cartridge for Lefaucheux and other guns."—*A communication to him from abroad by Joseph Audouy, of 39, Faubourg St. Martin, Paris, France.*
Provisional protection only.

NORTON.
18th May 1867.

1485. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in drying malt and also brewers' and distillers' grains and spent hops."
Letters Patent sealed.

NORTON. 18th May 1867.

1486. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in machinery for washing and drying wool and other materials." *Letters Patent sealed.*

METCALF. 20th May 1867.

1487. THOMAS METCALF, of Newton Heath, near Manchester, in the County of Lancaster, for an invention for—"Improvements in burning all hydro-carbon oils, such as creosote, petroleum, paraffin oil, shale oil, gas tar, and other similar products capable of being used as fuel." *Letters Patent sealed.*

BOTTOMLEY. 20th May 1867.

1488. JOHN BOTTOMLEY, of Laister Dyke, near Bradford, in the County of York, Hotel Proprietor, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

MCCOMAS. 20th May 1867.

1489. THOMAS MCCOMAS, of Old Broad Street, in the City of London, for an invention for—"Improvements in raising sunken vessels."—*A communication to him from abroad by Samuel William Maquay, of the Borough of Footscray, near the City of Melbourne, in the County of Bourke, in the Colony of Victoria.* *Letters Patent sealed.*

DUFRENÉ. 20th May 1867.

1490. HECTOR AUGUSTE DUFRENÉ, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, and 4, South Street, Finsbury, London, Civil Engineer, for an invention for—"Improvements in beer and other like engines."—*A communication from Monsieur Celestin Rahon, a person resident at Douzy, in the Empire of France.* *Letters Patent sealed.*

CLARK. 20th May 1867.

1491. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved instrument for sharpening cutlery."—*A communication to him from abroad by James Meyer, junior, of the City of New York, in the United States of America.* *Letters Patent sealed.*

ABEL. 20th May 1867.

1492. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"A new or improved machine or apparatus for filling sacks with grain, flour, bran, sugar, and other granular or pulverous substances."—*A communication to him from abroad by Auguste Hourdain, of Avesnes, Nord, in the Empire of France, Miller.* *Provisional protection only.*

MONCKTON. 20th May 1867.

1493. EDWARD HENRY CRADOCK MONCKTON, of the Oriental Bank Corporation, Threadneedle Street, London, for an invention for—"Improvements in preserving meat, fruit and vegetables." *Provisional protection only.*

CHAMBERLAIN. 20th May 1867.

1494. HUMPHREY CHAMBERLAIN, of Wakefield, in the County of York, Engineer, for an invention for—"Improvements in steam-boiler and other furnaces." *Letters Patent sealed.*

TONGUE. 20th May 1867.

1495. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the arrangement and construction of furnaces for steam-boilers and various other useful purposes."—*A communication to him from abroad by Emmanuel Minary, Engineer, of Besançon, in the Empire of France.* *Letters Patent sealed.*

BOND. 20th May 1867.

1496. EDWARD BOND, of Whitby, in the County of York, for an invention for—"Improvements in the building or construction of ships' sail yards." *Provisional protection only.*

BARFORD. SKERMAN. 20th May 1867.

1497. VALENTINE BARFORD, of Market Hill, St. Neots, in the County of Huntingdon, and JOHN SKERMAN, of Equesbury, in the same County, for an invention for—"Improvements in boilers for boiling or steaming roots, and for heating water for other purposes." *Letters Patent sealed.*

YOUNG. 20th May 1867.

1498. EDWARD YOUNG, of Oughtibridge, near Sheffield, Consulting Mineral Engineer, for an invention for—"Improvements in treating iron ores to remove phosphorus therefrom." *Letters Patent sealed.*

CRANSTON. 20th May 1867.

1499. WILLIAM MCINTYRE CRANSTON, of 77, Upper Thames Street, in the City of London, for an invention for—"Improvements in reaping and mowing machines."—*A communication to him from abroad by Walter Abbott Wood, a person resident at Hoosick Fall, New York, United States of America.* *Letters Patent sealed.*

THOMSON. 20th May 1867.

1500. DAVID THOMSON, of 3, Old Street, in the County of Middlesex, for an invention for—"Improvements in steam rollers for rolling roads, and in pitch chains for working the same and for other purposes." *Letters Patent sealed.*

OWENS. 21st May 1867.

1501. JOHN OWENS, of Salford, in the County of Lancaster, Machinist, for an invention for—"Improvements in the manufacture of pile and other fabrics." *Provisional protection only.*

DAVIES. 21st May 1867.

1502. JOSEPH DAVIES, of High Park Road, Smethwick, near Birmingham, Mechanical Engineer, for an invention for—"Improvements in machinery for folding sheets of paper or other fabric or material." *Letters Patent sealed.*

MONCKTON. 21st May 1867.

1503. EDWARD HENRY CRADOCK MONCKTON, of the Oriental Bank Corporation, Threadneedle Street, in the City of London, for an invention for—"Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water." *Provisional protection only.*

GOUGH. 21st May 1867.

1504. JOHN GOUGH, of 42, Kerby Street, Hatton Garden, in the County of Middlesex, Engineer, for an invention for—"Improvements in arming presses for producing devices on the covers of books and other articles." *Letters Patent sealed.*

RUNKEL. 21st May 1867.

1505. MARC RUNKEL, of New York (United States of America), Engineer, at present residing at 54, Regent Street Quadrant, in the County of Middlesex, for an invention for—"A new indicator for carriages." *Provisional protection* NOT *granted.*

HURDMAN. 21st May 1867.

1506. GEORGE HURDMAN, of Wolverhampton, in the County of Stafford, Pattern Maker, for an invention for—"Improvements in charcoal box-irons." *Letters Patent sealed.*

NICHOLS. BURNLEY. WILSON. JACKSON. 21st May 1867.

1507. WILLIAM NICHOLS, JAMES BURNLEY, THOMAS WILSON, and GEORGE JACKSON, all of Leeds, in the County of York, for an invention for—"Improvements in machinery for breaking or cutting flax, hemp, jute and other fibrous materials." *Letters Patent sealed.*

HOLT. HOLT. 21st May 1867.

1508. SAMUEL HOLT, and GREENWOOD HOLT, of Bacup, in the County of Lancaster, Picker Makers, for an invention for—"Improvements in pickers and in the method of manufacture and apparatus employed therein." *Provisional protection only.*

THURNHAM. 21st May 1867.

1509. CHARLES HENRY THURNHAM, of No. 47, Chichester Villas, Kilburn, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction and application of certain mechanical arrangements to be adapted as a self-acting and ink-supplying writing apparatus or fountain pen." *Letters Patent sealed.*

FOSTER. BUNNEY. 21st May 1867.

1510. SAMUEL HALL FOSTER, and THOMAS BUNNEY, both of Leicester, Manufacturers, for an invention for—"Improvements in means or apparatus for the manufacture of looped fabrics." *Letters Patent sealed.*

HENSON. 21st May 1867.

1511. WILLIAM FREDERICK HENSON, of New Cavendish Street, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in rails for railways." *Letters Patent sealed.*

STENHOUSE. DUNCAN. 21st May 1867.

1512. JOHN STENHOUSE, of 17, Rodney Street, Pentonville, in the County of Middlesex, Chemist, and JAMES DUNCAN, of Clyde Wharf, West Ham, in the County of Essex, Sugar Refiner, for an invention for—"Improvements in the treatment of animal charcoal and in the apparatus employed therein." *Letters Patent sealed.*

BARCLAY. 21st May 1867.

1513. ANDREW BARCLAY, of Kilmarnock, in the County of Ayr, North Britain, for an invention for—"Improvements in apparatus for injecting and ejecting liquids and fluids." *Letters Patent sealed.*

NEWTON. 21st May 1867.

1514. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved central-fire metallic cartridge and apparatus for manufacturing the same."—*A communication to him from abroad by Dexter Smith and Joseph Miller Hall, both of Springfield, in the State of Massachusetts, United States of America.*
Letters Patent sealed.

WASSERMANN. HERBST. 21st May 1867.

1515. OSCAR WASSERMANN, Engineer, and JOHANN HEINRICH HERBST, Proprietor, of Call, in the Kingdom of Prussia, for an invention for—"Improvements in refining lead." *Letters Patent sealed; specification filed by order.*

MABSON. 21st May 1867.

1516. JOHN MABSON, of the Town and County of the Town of Newcastle-upon-Tyne, for an invention for—"Improvements in sewing-machines."
Letters Patent sealed.

ADAMSON. 22nd May 1867.

1517. DANIEL ADAMSON, of the Newton Moor Iron Works, near the City of Manchester, Engineer, for an invention for—"Improvements in furnaces for heating the air stoves of blast furnaces and for other purposes, and in utilizing the products of combustion from such stoves." *Letters Patent sealed.*

COLLINS. SMETHURST. 22nd May 1867.

1518. JAMES COLLINS, of Bolton-le-Moors, in the County of Lancaster, Machinist, and JAMES SMETHURST, of the same place, Brassfounder, for an invention for—"Improvements in machinery for dressing hides." *Provisional protection only.*

CARTLAND. BOLD. 22nd May 1867.

1519. JOHN CARTLAND, of Birmingham, in the County of Warwick, Manufacturer, and HENRY BOLD, of Longton, in the County of Stafford, Manufacturer, for an invention for—"Improvements in ornamenting certain kinds of bowls of castors for furniture." *Provisional protection only.*

HARGREAVES. ROBINSON. 22nd May 1867.

1520. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, and THOMAS ROBINSON, of Widnes, in the same County, Ironfounder, for an invention for—"Improvements in the manufacture of steel and soft iron from cast iron." *Letters Patent sealed.*

MURPHY. 22nd May 1867.

1521. WILLIAM JEREMIAH MURPHY, of Cork, in the County of the City of Cork, Ireland, for an invention for—"Improvements in breech-loading fire-arms and cartridges." *Letters Patent sealed; no specification filed.*

MOSS. 22nd May 1867.

1522. RALPH SLAZENGER MOSS, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in wearing-apparel."
Provisional protection NOT *granted.*

BROOKES. 22nd May 1867.

1523. WILLIAM BROOKES, of 62, Chancery Lane, London, in the County of Middlesex, Civil Engineer and Patent Agent, for an invention for—"An improved lubricator."—*A communication to him from abroad by Edwin Faull, of Maldon, in the Colony of Victoria, Machinist.* *Provisional protection only.*

CLARK. 22nd May 1867.

1524. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved fabric for the manufacture of machine belting and for other purposes."—*A communication to him from abroad by Zenas Marshall Crane and James Brewer Crane, both of Dalton, Berkshire County, State of Massachusetts, United States of America.* *Letters Patent sealed.*

KAUFMANN. 22nd May 1867.

1525. JOSEPH MEYERS KAUFMANN, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved means or apparatus to be used for travelling through the atmosphere and on land and water, part of which apparatus is equally applicable to other purposes." *Provisional protection only.*

NEWTON. 22nd May 1867.

1526. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in portable photographic apparatus."—*A communication to him from abroad by Henry Cook, of the Chaussée d'Antin, Paris, in the Empire of France.*
Provisional protection only.

MARTIN. 22nd May 1867.

1527. ANTOINE MARTIN, of Nantes, in the Empire of France, for an invention for—"Improvements in preserving grain and in the construction of the granaries to contain the same." *Letters Patent sealed.*

HELY. MARSHALL. 22nd May 1867.

1528. ALFRED AUGUSTUS HELY, of Manbey Grove, in the County of Essex, Gentleman, and JOHN MARSHALL, of Trafalgar Road, Greenwich, in the County of Kent, Civil and Mechanical Engineer, for an invention for—"Improvements in machinery for obtaining pressure." *Letters Patent sealed.*

HUGHES. HEAD. 22nd May 1867.

1529. EBENEZER WILLIAM HUGHES, of 5, Queen's Square, Westminster, and THOMAS HOWARD HEAD, of 9, Dowgate Hill, in the City of London, for an invention for—"Improvements in rotatory engines and pumps."
Provisional protection only.

JOHNSON. 23rd May 1867.

1530. FREDERICK HARDWICK JOHNSON, Firm of Cotton and Johnson, of Grafton Street, Soho, in the County of Middlesex, for an invention for—"Improvements in gas blow pipes and in blow pipe torches or flames." *Letters Patent sealed.*

THEILER. THEILER. THEILER. 23rd May 1867.

1531. MEINRAD THEILER, sen., RICHARD THEILER, and MEINRAD THEILER, jun., Telegraph and Scientific Instrument Makers, of 156, Barnsbury Road, Islington, Middlesex, for an invention for—"Improvements in telegraphic instruments and electric clocks." *Provisional protection only.*

SIEMENS. 23rd May 1867.

1532. CHARLES WILLIAM SIEMENS, of No. 3, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in the means and apparatus employed for conveying telegraphic dispatches, letters and other light articles through tubes."—*Partly the result of a communication made to him from abroad by Dr. Werner Siemens, of Berlin, in the Kingdom of Prussia, and partly of an invention and discovery made by himself.* *Letters Patent sealed.*

OLMADE, *born* FEUILLET. 23rd May 1867.

1533. OLMADE (RODOLPHE), born Feuillet (Marie Françoise Angèlique), of Paris, Department of Seine, Empire of France, Artist Painter, for an invention for —"An improved table with rotary top." *Provisional protection only.*

CLARK. 23rd May 1867.

1534. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in typographic printing machines."—*A communication to him from abroad by Auguste Hippolyte Marinoni, Machine Builder, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

HOWELL. HARDY. 23rd May 1867.

1535. EDWARD HOWELL, and THOMAS HARDY, both of Poole, in the County of Dorset, for an invention for—"Improvements in turnip or root-cutting machines."
Letters Patent sealed.

ATKINSON. ATKINSON. 23rd May 1867.

1536. SIMON ATKINSON, and THOMAS ATKINSON, of Otley, in the County of York, Machine Makers, for an invention for—"Improvements in machinery for folding paper." *Letters Patent sealed.*

BROOMAN. 23rd May 1867.

1537. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for —"Improvements in kilns or furnaces particularly applicable for burning plaster of Paris."—*A communication to him from abroad by Paul Louis Davizu, of Puteaux, France.* *Letters Patent sealed.*

GREEN. 23rd May 1867.

1538. THOMAS GOODWIN GREEN, of Church Gresley Pottery, in the County of Derby, Earthenware Manufacturer, for an invention for—"Improvements in the manufacture of articles of earthenware." *Letters Patent sealed.*

NEWTON. 23rd May 1867.

1539. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for —"An improved feed water arrangement for the tenders or water tanks of locomotive engines."—*A communication to him from abroad by Charles Schau, of Neustadt, in the Empire of Austria.* *Provisional protection only.*

STUCKENSCHMIDT. 23rd May 1867.

1540. LOUIS STUCKENSCHMIDT, of Seething Lane, in the City of London, Engineer, for an invention for—"Improvements in the means of and apparatus for landing, trans-shipping, or discharging grain and other substances in or from ships, vessels, granaries or warehouses, and for taking or drawing samples of grain from granaries." *Letters Patent sealed.*

BLACKHAM. 24th May 1867.

1541. HENRY BLACKHAM, of Wolverhampton, in the County of Stafford, Spectacle Frame Maker, for an invention for—"Improvements in the manufacture of spectacle frames." *Provisional protection only.*

MUTERSE. 24th May 1867.

1542. JEAN MARIE MUTERSE, of the Town of Guérande, Département de la Loire Inférieure, in the Empire of France, Chemist, for an invention for—"A process for extinguishing fires by means of cartridges composed of the most improper materials to combustion, diluted in water, for projecting on fire."
Provisional protection only.

MARTIN. GRINT. 24th May 1867.

1543. CLEMENT MARTIN, of Hammersmith, in the County of Middlesex, and JAMES GRINT, of Battersea, in the County of Surrey, for an invention for—"Improvements in railway buffers." *Provisional protection only.*

HELLIWELL. 24th May 1867.

1544. THOMAS WILLIAM HELLIWELL, of Brighouse, in the County of York, for an invention for —"Improvements in looms for weaving and in apparatus connected therewith." *Letters Patent sealed.*

WELLS. 24th May 1867.

1545. GEORGE MILES WELLS, of 26, Aldermanbury, in the City of London, for an invention for—"Improvements in apparatus to be employed in the manufacture of boots and shoes." *Provisional protection only.*

SLATTER. 24th May 1867.

1546. LOUISA SLATTER, of Drayton, in the County of Oxford, for an invention for—"Improvements in cases for packing and transporting butter and other dairy produce." *Provisional protection only.*

CLARK. 24th May 1867.

1547. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in steam generators."—*A communication to him from abroad by Richard Joseph Nunn, of Savannah, Chatham County, State of Georgia, United States of America.* *Letters Patent sealed.*

HOWARD. 24th May 1867.

1548. GEORGE HOWARD, of Berners Street, Oxford Street, in the County of Middlesex, Cabinet Maker, for an invention for—"Improvements in the construction of parquet flooring." *Letters Patent sealed.*

SANDERSON. 24th May 1867.

1549. CHARLES SANDERSON, of Worksop, in the County of Nottingham, Steel Manufacturer, for an invention for—"Improvements in the manufacture or melting of cast steel." *Letters Patent sealed.*

GREENWOOD. 24th May 1867.

1550. THOMAS GREENWOOD, of Leeds, in the County of York, Machine Maker, for an invention for—"Improvements in boring metals in the solid." *Letters Patent sealed.*

BOUSFIELD. 24th May 1867.

1551. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in braiders or embroidering apparatus to be used with sewing-machines."—*A communication to him from abroad by Louis Morris, a person resident at Broadway, New York, United States of America.* *Provisional protection only.*

NAPIER. 24th May 1867.

1552. JAMES MURDOCH NAPIER, of York Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in appliances for serving mustard." *Letters Patent sealed.*

SIMPSON. 25th May 1867.

1553. JAMES SIMPSON, of Hulme, in the City of Manchester, County of Lancaster, Frame Maker, for an invention for—"A new and improved arrangement of apparatus to be employed in producing photographic pictures." *Provisional protection only.*

OLDROYD. 25th May 1867.

1554. ALLEN OLDROYD, of Clapton, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in the manufacture of tobacco and other pouches, part of such improvements being applicable to the frames of other bags or receptacles." *Letters Patent sealed.*

CLARK. 25th May 1867.

1555. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of what are termed watered fabrics, and in apparatus connected therewith."—*A communication to him from abroad by César Tavernier, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

BAGGS. BRABY. 25th May 1867.

1556. ISHAM BAGGS, of High Holborn, in the County of Middlesex, and FREDERICK BRABY, of Deptford, in the County of Kent, for an invention for—"Improvements in the treatment and utilization of certain ferruginous salts and solutions." *Letters Patent sealed.*

RYLAND. 25th May 1867.

1557. WILLIAM RYLAND, of Birmingham, in the County of Warwick, Manager of Works, for an invention for—"An improvement or improvements in tea pots, coffee pots and other vessels." *Letters Patent sealed.*

DUTTON. 25th May 1867.

1558. WILLIAM DUTTON, of Winsford, in the County of Chester, Salt Maker, for an invention for—"Improvements in constructing furnaces for heating salt pans and for other purposes." *Letters Patent sealed.*

STRUVÉ. 25th May 1867.

1559. WILLIAM PRICE STRUVÉ, of Cwm Avon, Taibach, South Wales, Esquire, for an invention for—"Improvements in furnaces for calcining copper ores and other ores and metals." *Letters Patent sealed.*

BARLOW. 27th May 1867.

1560. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in apparatus for coupling pipes."—*A communication to him from abroad by Messieurs John Baptist Mette, junior, and Julius Bigot-Renaux, of No. 45, Rue St. Sebastien, Paris, Manufacturers.* *Letters Patent sealed.*

FROST. FROST. 27th May 1867.

1561. HERBERT FROST, senior, and HERBERT FROST, junior, both of the City of Manchester, Machinists, for an invention for—"Improvements in apparatus for measuring fluids, which improvements are also applicable for obtaining motive-power and for pumping." *Letters Patent sealed.*

METCHIM. 27th May 1867.

1562. WILLIAM PAUL METCHIM, of No. 20, Parliament Street, in the City of Westminster, Lithographer and General Printer, for an invention for—"Improvements for taking copies of lithographs, zincographs and other printed matters." *Provisional protection only.*

AFFLECK. 27th May 1867.

1563. WILLIAM AFFLECK, of Swindon, in the County of Wilts, Engineer, for an invention for—"A new or improved tyre or guard for wheels of reaping, mowing and other machines." *Letters Patent sealed.*

KNOTT. JEYES. 27th May 1867.

1564. ROBERT ROWE KNOTT, of 269, Fulham Road, Brompton, and JOHN JEYES, of 10, Stanley Road, Upper Holloway, both in the County of Middlesex, for an invention for—"An improvement in preparing wood and adapting it as a substitute for leather." *Provisional protection only.*

DUJARDIN. 27th May 1867.

1565. PIERRE ANTOINE JOSEPH DUJARDIN, of 29, Boulevart St. Martin, Paris, in the Empire of France, Physician, for an invention for—"Improvements in electric telegraphs." *Letters Patent sealed.*

SNELL. 27th May 1867.

1566. WILLIAM SNELL, of No. 16, Clement's Inn, Strand, in the County of Middlesex, for an invention for—"Improvements in mining, tunnelling and stone dressing machines, and valve motion therefor."—*A communication to him from abroad by Richard Channing More Lovell, of Covington, in the County of Kenton and the State of Kentucky, in the United States of America.* *Complete specification; Letters Patent sealed.*

WHETTEM. WALKER. 27th May 1867.

1567. WILLIAM HENRY WHETTEM, of Portsmouth, in the County of Hants, and EDMUND WALKER, of Poplar, in the County of Middlesex, for an invention for—"Improvements in or connected with screw propellers." *Letters Patent sealed.*

MEWBURN. 27th May 1867.

1568. JOHN CLAYTON MEWBURN, of 166, Fleet Street, in the City of London, for an invention for—"Improvements in harvesting machines."—*A communication to him from abroad by Leander McCormick and Lambert Erpelding, both of Chicago, in the United States of America.* *Provisional protection only.*

PETHER. 28th May 1867.

1569. HENRY PETHER, of 6, Trigon Road, Clapham Road, in the County of Surrey, Artist, for an invention for—"A new or improved method for producing ornamental bricks for building purposes and in apparatus therefor." *Letters Patent sealed.*

LOAM. FEARNS. 28th May 1867.

1570. MICHAEL LOAM, of Hampton, in the County of Middlesex, Engineer, and FRANCIS HENRY FEARNS, Machinist, of Walworth Common, S., for an invention for—"Improvements in apparatus applicable to the microscope and other optical instruments." *Provisional protection* NOT *granted.*

HUGHES. 28th May 1867.

1571. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"A combined seeder, cultivator and roller."—*A communication to him from abroad by James Page Long and Peter Low, both of Cherry Valley, Otsego County, New York, United States of America.* *Letters Patent sealed.*

SIMMONS. 28th May 1867.

1572. GEORGE HENRY JAMES SIMMONS, of 41, Stanhope Street, Hampstead Road, Middlesex, London, Clerk, for an invention for—"Improvements in lamps for burning hydro-carbon and other oils." *Provisional protection only.*

VANDENVINNE. 28th May 1867.

1573. FLORENT JOSEPH VANDENVINNE, of Brussels, in the Kingdom of Belgium, for an invention for—"An improved machine or plough for clearing or grubbing up uncultivated land." *Letters Patent sealed.*

COULSON.
28th May 1867.

1574. WILLIAM COULSON, of Shamrock House, near the City of Durham, Engineer, for an invention for—"Improvements in the doors and door frames of furnaces." *Letters Patent sealed.*

BONNEVILLE.
28th May 1867.

1575. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the production of motive-power and in the apparatus connected therewith."—*A communication from Jacques Belou, a person resident at No. 12, Rue Blanche, Paris, aforesaid, Civil Engineer.*
Complete specification; Letters Patent sealed.

BONNEVILLE.
28th May 1867.

1576. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in machinery for carding wool and other fibrous materials."—*A communication from Célestin Martin, a person resident at Pépinster Verviers, in the Kingdom of Belgium, Manufacturer.* *Complete specification; Letters Patent sealed.*

BONNEVILLE.
28th May 1867.

1577. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in machinery for weaving wool and other fibrous materials."—*A communication from Célestin Martin, a person resident at Pépinster Verviers, in the Kingdom of Belgium, Manufacturer.* *Complete specification; Letters Patent sealed.*

COCKEY.
COCKEY.
28th May 1867.

1578. HENRY COCKEY, and FRANCIS CHRISTOPHER COCKEY, of the firm of Edward Cockey and Sons, of The Iron Works, Frome, in the County of Somerset, Engineers, for an invention for—"Improvements in seal or dip pipes in connection with gas and other retorts." *Letters Patent sealed.*

CASHIN.
28th May 1867.

1579. THOMAS FREDERICK CASHIN, Civil Engineer, of Sheffield, in the County of York, for an invention for—"An improved compound lever for working railway points and signals, applicable also to other purposes." *Provisional protection only.*

MITCHELL.
28th May 1867.

1580. WILLIAM MITCHELL, of Northwold, near Brandon, in the County of Norfolk, for an invention for—"An improved food for sheep and other animals."
Letters Patent sealed.

DETHIOU.
BEAUBRY.
28th May 1867.

1581. LOUIS HYACINTHE DETHIOU, and FRÉDÉRIC BEAUBRY, of the City of Paris, in the French Empire, Merchants, for an invention for—"An improved tongless buckle with continuous pressure." *Letters Patent sealed.*

CLARK.
28th May 1867.

1582. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in machines for washing and bleaching clothes and all kinds of textile materials."—*A communication to him from abroad by Jules Decoudun, Mechanical Engineer, of 29, Boulevart St. Martin, Paris.*
Letters Patent sealed.

TUNKS.
29th May 1867.

1583. DAVID TUNKS, of 36, Blackburn Road, Accrington, in the County of Lancaster, for an invention for—"Improvements in galvanometers for receiving signals through submarine and other electric-telegraph lines, and for testing them."
Provisional protection only.

POLLIT.
29th May 1867.

1584. RICHARD POLLIT, of Bolton-le-Moors, in the County of Lancaster, Boiler Maker, for an invention for—"Improvements in steam-boilers and the method of construction of the same." *Letters Patent sealed and specification filed by order.*

BURGESS.
29th May 1867.

1585. WILLIAM JAMES BURGESS, of Brentwood, in the County of Essex, Engineer, for an invention for—"Improvements in the construction of fingers for mowing-machines." *Letters Patent sealed.*

SIMONS.
29th May 1867.

1586. JEAN FRANÇOIS NICOLAS BIESMAN SIMONS, of No. 23, Kettenhofweg, Frankfort-on-the-Maine, for an invention for—"Improvements in preventing the incrustation of steam-boilers." *Letters Patent sealed.*

MINASI.
29th May 1867.

1587. CARLO MINASI, of No. 15, College Place, Camden Town, in the County of Middlesex, Professor of Music, for an invention for—"Improvements in musical wind instruments called 'Trombonettes.'" *Provisional protection only.*

MITCHELL. 29th May 1867.

1588. THOMAS MITCHELL, of the firm of John Mitchell and Sons, of Waterbarn Mills, Stacksteads, in the County of Lancaster, Manufacturers, for an invention for—"Certain improvements in the manufacture of felt carpeting."
Letters Patent sealed.

BREAN. 29th May 1867.

1589. FREDERICK JOSEPH BREAN, of Bristol, in the County of Gloucester, for an invention for—"Improvements in producing letters in gold, silver and other metals on glass, and in implements employed for that purpose." *Letters Patent sealed.*

COOPER. 29th May 1867.

1590. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in cartridges for breech-loading fire-arms."—*The result partly of a communication made to him from abroad by Charles François Galand, of Liége, in the Kingdom of Belgium, and partly of invention and discovery made by him.* *Letters Patent sealed.*

FRENCH. 29th May 1867.

1591. JAMES MARTIN FRENCH, of Birmingham, in the County of Warwick, Licensed Victualler, for an invention for—"Improvements in instruments or apparatus for measuring spirits and other liquids." *Provisional protection only.*

NEWTON. 29th May 1867.

1592. ROBERT NEWTON, of Lower Providence Mill, near Keighley, in the County of York, for an invention for—"Improvements in the furnace apparatus of steam-boilers." *Provisional protection only.*

GAGE. 29th May 1867.

1593. FRANKLIN BENJAMIN GAGE, of St. Johnsbury, in the State of Vermont, United States of America, for an invention for—"An improved means or method of illuminating the shadows and harmonising the lights and shades in photographic impressions." *Complete specification; Letters Patent sealed.*

PASSEE. 29th May 1867.

1594. THOMAS EDMUND PASSEE, of Russell Square, in the County of Middlesex, Gentleman, for an invention for—"An improved mode of obtaining motive-power and the apparatus employed therein." *Letters Patent sealed.*

RITCHIE. WILLANS. 29th May 1867.

1595. WILLIAM BARRY RITCHIE, of Mount Pottinger, Belfast, and JACOB GEOGHEGAN WILLANS, of St. Stephen's Crescent, in the County of Middlesex, for an invention for—"Improvements in drying peat and other materials."
Letters Patent sealed.

TURNER. 29th May 1867.

1596. HENRY TURNER, of the Thames Iron Works, Orchard Yard, Blackwall, in the County of Middlesex, Managing Engineer, for an invention for—"Improvements in marine and other steam-engines on the high and low pressure compound principle." *Letters Patent sealed.*

JONES. 29th May 1867.

1597. EDWARD JONES, of Pontblyddyn, in the Parish of Mold, in the County of Flint, Engineer, for an invention for—"Improvements in the construction of safety lamps for miners." *Letters Patent sealed.*

NEWTON. 29th May 1867.

1598. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved method of producing mosaic veneers."—*A communication to him from abroad by The American Mosaic Veneering Company (Incorporated), of the City of New York, in the United States of America.* *Letters Patent sealed.*

NEWTON. 29th May 1867.

1599. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of producing printing blocks or surfaces for printing or staining various fabrics."—*A communication to him from abroad by Thomas Crossley, of Bridgeport, Connecticut, in the United States of America.* *Letters Patent sealed.*

GREENWOOD. 29th May 1867.

1600. THOMAS GREENWOOD, of Leeds, in the County of York, Machine Maker, for an invention for—"Improvements in the construction of milling machines."
Letters Patent sealed.

OAKES. 29th May 1867.

1601. HENRY OAKES, of Birmingham, in the County of Warwick, Jeweller, for an invention for—"Improvements in the manufacture of earrings."
Provisional protection only.

BAIN. 30th May 1867.

1602. HUGH BAIN, of the Town of Alexandria, in the County of Dumbarton, North Britain, Millwright, for an invention for—"Improvements in dyeing yarns and in the machinery or apparatus employed therefor." *Provisional protection only.*

BROOMAN. 30th May 1867.

1603. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in photographic albums and other like articles."—*A communication to him by Frederic Wilhelm Marx, a person resident at Paris, France.*

Letters Patent sealed.

FRANCOMBE. 30th May 1867.

1604. JAMES FRANCOMBE, of Newport, in the County of Monmouth, South Wales, Engineer, for an invention for—"A new or improved engine or machine for obtaining and applying motive-power." *Provisional protection only.*

ORR. 30th May 1867.

1605. WILLIAM ORR, of Greenock, in the County of Renfrew, North Britain, Sugar Refiner, for an invention for—"Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar."

Provisional protection only.

ASTBURY. 30th May 1867.

1606. JAMES ASTBURY, of Smethwick Foundry, near Birmingham, in the County of Warwick, Engineer, Ironfounder and Ordnance Manufacturer, for an invention for—"Improvements in casting Bessemer metal, steel and other metals."

Letters Patent sealed.

WOOD. 30th May 1867.

1607. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the manufacture of printed 'tapestry' carpets." *Letters Patent sealed.*

NEWTON. 30th May 1867.

1608. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the treatment of fabrics made wholly or partly of jute, flax, cotton or vegetable fibres, so as to prepare them for dyeing or printing, and rendering them applicable for the manufacture of carpets or other printed goods."—*A communication to him from abroad by Thomas Crossley, of Bridgeport, in the State of Connecticut, United States of America.* *Letters Patent sealed.*

NEWTON. 30th May 1867.

1609. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of felted fabrics."—*A communication to him from abroad by Thomas Crossley, of Bridgeport, in the State of Connecticut, United States of America.* *Letters Patent sealed.*

PETITJEAN. 30th May 1867.

1610. TONY PETITJEAN, of No. 4, Brydges Street, in the County of Middlesex, Chemist, for an invention for—"A new means for procuring the more perfect combustion in the burning of fuel." *Letters Patent sealed.*

MENNONS. 30th May 1867.

1611. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of 8, Southampton Buildings, in the County of Middlesex, and 27, Rue Laffitte, Paris, in the Empire of France, for an invention for—"Improvements in the construction of magneto-electric batteries."—*A communication to him by Sören Hjorth, a person resident at No. 10, Norrebrogade, Copenhagen, in the Kingdom of Denmark.* *Letters Patent sealed.*

LAKE. 30th May 1867.

1612. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by E. S. Allin, of Springfield, Massachusetts, United States of America.* *Provisional protection only.*

DEMANET. 31st May 1867.

1613. FLORIBERT JOSEPH DEMANET, of Ixelles by Brussels, in the Kingdom of Belgium, Locksmith and Mechanician, for an invention for—"An apparatus for the purpose of giving sufficient draught to any kind of chimney."

Provisional protection only.

SCOTT. 31st May 1867.

1614. JOHN SCOTT, of Oxford Street, in the County of Middlesex, for an invention for—"Improvements in apparatus and in the means employed for subduing and extinguishing fires, partly applicable to other useful purposes."

Letters Patent sealed.

SHAKESPEARE. SHAKESPEARE. 31st May 1867.

1615. BENJAMIN SHAKESPEARE, of Wollaston, near Stourbridge, in the County of Worcester, Manager of Iron Works, and WILLIAM SHAKESPEARE, of Wollaston, aforesaid, Commission Agent, for an invention for—"Improvements in reverberatory furnaces used for puddling, melting and heating iron, and for other purposes."

Provisional protection only.

HINKS.
HINKS.
31st May 1867.

1616. JAMES HINKS, and JOSEPH HINKS, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in lamps for burning petroleum oil and other volatile liquid hydro-carbons." *Letters Patent sealed.*

DOLMAN.
31st May 1867.

1617. FREDERICK WILLIAM DOLMAN, of No. 39, Jermyn Street, Saint James's, in the County of Middlesex, Gentleman, for an invention for—"A new or improved method for obtaining an essential oil applicable as a curative agent or medicine in the treatment of inflammatory joint diseases, rheumatism, sprains, bruises and similar ailments."—*A communication to him from abroad by Lachlan Jamieson, of Buxar, in the Province of Bengal, in India, an officer there serving in Her Majesty's Army.* *Provisional protection only.*

LE BUTT.
31st May 1867.

1618. JOSIAH LE BUTT, of Haymaker Works, Bury St. Edmunds, in the County of Suffolk, for an invention for—"Improvements in hay-making machines." *Provisional protection only.*

PORTER.
31st May 1867.

1619. THOMAS PORTER, of Derby Street, Sunderland, in the County of Durham, for an invention for—"Improvements in apparatus for supporting or holding music and other books, and for turning over the leaves of the same." *Provisional protection only.*

CAITHNESS.
31st May 1867.

1620. The Right Honourable JAMES, EARL OF CAITHNESS, of Hill Street, in the County of Middlesex, for an invention for—"Improvements in ships' compasses." *Letters Patent sealed.*

REECE.
31st May 1867.

1621. REES REECE, of Llandilo, in the County of Carmarthen, Chemist, for an invention for—"An improved mode of and apparatus for producing cold." *Letters Patent sealed.*

LANCELOTT.
31st May 1867.

1622. JAMES LANCELOTT, of Birmingham, in the County of Warwick, Jeweler, for an invention for—"Improvements in the manufacture of ornamental chains and bands." *Letters Patent sealed.*

LAWRENCE.
31st May 1867.

1623. PHINEAS LAWRENCE, of Basinghall Street, in the City of London, Merchant, for an invention for—"Improvements in apparatus for applying adhesive agents to pieces of paper and other light materials, and for lifting the same, especially applicable to machinery for the manufacture of envelopes." *Letters Patent sealed.*

CLARK.
31st May 1867.

1624. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for applying and regulating motive-power."—*A communication to him from abroad by Joseph de Susini, Gentleman, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

POULTNEY.
1st June 1867.

1625. THOMAS POULTNEY, of Baltimore, in the State of Maryland, one of the United States of America, but now residing at the Langham Hotel, in the County of Middlesex, for an invention for—"Improvements in the construction of revolving fire-arms." *Letters Patent sealed.*

POULTNEY.
1st June 1867.

1626. THOMAS POULTNEY, of Baltimore, State of Maryland, United States of America, but now residing at the Langham Hotel, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

BRADFORD.
1st June 1867.

1627. WILMOT BRADFORD, of the Junior United Service Club, in the county of Middlesex, Colonel in Her Majesty's Service, for an invention for—"An improved combination of wood and textile substance for the construction of boats, baths and other vessels to be folded up for carriage." *Provisional protection only.*

SCHAEFFER.
1st June 1867.

1628. ANTON GEORG SCHAEFFER, of Gloucester Street, Newcastle-on-Tyne, for an invention for—"Improvements in obtaining increased light in the combustion of illuminating matters." *Provisional protection only.*

HOUGHTON.
1st June 1867.

1629. FREDERICK BURNETT HOUGHTON, of Grove House, West Reading, in the County of Berks, for an invention for—"Improvements in steam-boilers and in evaporating pans." *Letters Patent sealed.*

ALBRIGHT.
1st June 1867.

1630. ANDREW ALBRIGHT, of Dryden, in the State of New York, in the United States of America, for an invention for—"Covering buckles, saddle-trees, turrets, hooks, and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum." *Provisional protection only.*

TAYLER.
1st June 1867.

1631. ENOCH TAYLER, late of 49, Burton Street, Cheltenham, now of No. 2, Acorn Court, Fetter Lane, London, for an invention for—"The facilitating the composition or arranging of type of various founts, for displaying jobs or other works usually required to be done in printing offices." *Provisional protection only.*

HORREX.
1st June 1867.

1632. THEOPHILUS HORREX, of Number 13, South Square, Gray's Inn, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machines for hatching eggs." *Letters Patent sealed.*

PIDDING.
3rd June 1867.

1633. WILLIAM PIDDING, of Beresford Street, Camberwell Road, in the County of Surrey, Gentleman, for an invention for—"Improvements in reels or receivers upon which threads, silks or other fibrous material, in connection with needles (threaded or otherwise) are arranged, as also in the arrangement of needles threaded with any fibrous material, for the purpose of facilitating the use or uses of the same for all purposes of needlework." *Provisional protection* NOT *granted.*

MCLEAN.
3rd June 1867.

1634. EDWARD MCLEAN, of Stoke Newington, in the County of Middlesex, for an invention for—"Improvements in the construction of pianofortes and harmoniums." *Letters Patent sealed.*

RICHARDSON.
3rd June 1867.

1635. WILLIAM HADEN RICHARDSON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Certain improvements in the manufacture of iron and steel, and in the means or apparatus for effecting the same." *Letters Patent sealed.*

BROWN.
3rd June 1867.

1636. JAMES FLEMING BROWN, of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

CARVILLE.
3rd June 1867.

1637. CHARLES LOUIS JOSEPH CARVILLE, senior, of 2, Rue Sainte Appoline, Paris (Empire of France), Mechanician, for an invention for—"Improvements in the construction of steam-boilers and in apparatus connected therewith." *Letters Patent sealed.*

BARKER.
3rd June 1867.

1638. DAVID BARKER, of Northfleet, in the County of Kent, for an invention for—"Improvements in the construction of chambers for drying artificial fuel and other substances." *Provisional protection only.*

HARWOOD.
3rd June 1867.

1639. SAMUEL HARWOOD, of Northfleet, in the County of Kent, for an invention for—"Improvements in the construction of walls, buildings and other similar structures." *Provisional protection only.*

PAGE.
3rd June 1867.

1640. ROBERT WILLIAM PAGE, of Park Walk, Chelsea, in the County of Middlesex, for an invention for—"Improvements in the construction of hand garden engines and hydropults." *Provisional protection only.*

INSHAW.
4th June 1867.

1641. JOHN INSHAW, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in electrical clocks, which improvements may also be applied to other electrical instruments." *Letters Patent sealed.*

CAVANAGH.
4th June 1867.

1642. MICHAEL CAVANAGH, of Kensington, in the County of Middlesex, for an invention for—"Improvements in adjustable lock spindles." *Letters Patent sealed.*

WADDINGTON.
LONGBOTTOM.
4th June 1867.

1643. JOSEPH WADDINGTON, and BENJAMIN LONGBOTTOM, of Barrow in Furness, in the County of Lancaster, Iron and Brass Founders, Engineers, &c., for an invention for—"Certain improvements in moulds to be employed in casting Bessemer steel and other metals." *Letters Patent sealed.*

DAVIES.
4th June 1867.

1644. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the construction of paddle wheels."—*A communication to him from abroad by William Henry Holland, of Boston, Massachusetts, in the United States of America.* *Letters Patent sealed.*

LAIDLAW.
4th June 1867.

1645. THOMAS LAIDLAW, of Sillerbit Hall, in the County of Roxburgh, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of yarns used for weaving textile fabrics, and in the machinery or apparatus employed therefor." *Letters Patent sealed.*

MELDRUM.
4th June 1867.

1646. EDWARD MELDRUM, of Bathgate, in the County of Linlithgow, North Britain, Esquire, for an invention for—"Improvements in the purification of paraffine." *Letters Patent sealed.*

JOHNSON. 4th June 1867.

1647. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in racks or holders for whips, canes and other like articles."—*A communication to him from abroad by Edward Richmond, of New York, in the United States of America.*

Provisional protection only.

McOWEN. 4th June 1867.

1648. JAMES McOWEN, of Rochdale, in the County of Lancaster, Iron and Brass Founder, for an invention for—"Improvements in fire grates." *Letters Patent sealed.*

HART. 4th June 1867.

1649. HERBERT WILLIAM HART, of Clapham Common, in the County of Surrey, Engineer, for an invention for—"An improved construction of raft."—*A communication to him from abroad by Charles Wheeler Denison, of Philadelphia, in the United States of America.* *Provisional protection only.*

HANSON. 5th June 1867.

1650. DAVID HANSON, of Dukinfield, in the County of Chester, for an invention for—"Certain improvements in furnaces, and in apparatus to be employed in the construction of steam-boilers." *Letters Patent sealed.*

GAUDET. 5th June 1867.

1651. JULES GAUDET, of Gresham Street, in the City of London, Gentleman, for an invention for—"Improvements in night and fog signal apparatus for preventing accidents on railways." *Provisional protection only.*

RAUSCH. DARLET. 5th June 1867.

1652. NICOLAS RAUSCH, and EDME LÉON DARLET, both of the City of Brussels, in the Kingdom of Belgium, Merchants, for an invention for—"Improvements in the manufacture of artificial fuel."

Letters Patent sealed; specification filed by order.

SAUNDERS. 5th June 1867.

1653. THOMAS HARVEY SAUNDERS, of 27, Coombe Road, Sydenham, in the County of Kent, for an invention for—"A new oil or gas stove."

Letters Patent sealed.

BOULAY. 5th June 1867.

1654. CHARLES BOULAY, of Paris, France, Mathematical Instrument Maker, for an invention for—"Improvements in galvanic batteries." *Letters Patent sealed.*

WHITE. 5th June 1867.

1655. GEORGE WHITE, of 68, Queen Street, Cheapside, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of hydrate and carbonates of soda."—*A communication to him from abroad by Mr. Filippo Blan, Telegraphical Engineer, of Turin, Italy.* *Provisional protection only.*

SCHMOLLE. 5th June 1867.

1656. LÉONCE BERNARD SCHMOLLE, of Aldermanbury, in the City of London, Manufacturer, for an invention for—"Improvements in crinoline skirts."

Provisional protection only.

EVANS. 5th June 1867.

1657. ISAAC EVANS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in spring hooks."—*The result partly of a communication from abroad made to him by Samuel Lagwitz, of New Jersey, in the United States of America, and partly of invention and discovery made by him.*

Letters Patent sealed.

MILBANK. 5th June 1867.

1658. ISAAC MORRIS MILBANK, of Greenfield Hill, in the State of Connecticut, United States of America, for an invention for—"An improvement in breech-loading fire-arms and cartridges adapted to such arms." *Letters Patent sealed.*

ADAMS. 6th June 1867.

1659. JAMES ADAMS, of No. 5, St. John's Terrace, Sadlers' Wells, in the County of Middlesex, for an invention for—"Improvements in machines for dating or printing of railway and other tickets." *Provisional protection only.*

TEMPLAR. 6th June 1867.

1660. BENJAMIN TEMPLAR, of Holly Bank, Tetlow Fold, near the City of Manchester, Schoolmaster, for an invention for—"Improvements in fastenings for window sashes." *Letters Patent sealed.*

BLAND. 6th June 1867.

1661. EDWARD BLAND, of Bury, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

LIVESEY. 6th June 1867.

1662. JAMES LIVESEY, of No. 9, Victoria Chambers, Westminster, for an invention for—"Improvements in paper-folding machines."

Provisional protection NOT *granted.*

BROWN. 6th June 1867.

1663. THOMAS BROWN, of No. 96, Newgate Street, in the City of London, Civil Engineer, for an invention for—"Improvements in artificial limbs."—*A communication to him from abroad by Amasa A. Marks, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

WILSON.
6th June 1867.

1664. THOMAS WILSON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in the construction of breech-loading fire-arms, and in the manufacture and construction of cartridges for breech-loading fire-arms." *Provisional protection only.*

MAYNARD.
6th June 1867.

1665. ROBERT MAYNARD, of Whittlesford, in the County of Cambridge, Engineer, for an invention for—"Improvements in portable chaff-cutting machinery." *Letters Patent sealed.*

ELLIS.
6th June 1867.

1666. EDWIN ELLIS, of Nottingham, for an invention for—"Improvements in twist lace machinery." *Provisional protection only.*

TURNER.
ALLEN.
6th June 1867.

1667. GEORGE RICH TURNER, and WILLIAM THOMAS ALLEN, of Upper Thames Street, in the City of London, Engineers, for an invention for—"Improvements in the manufacture or construction of gates and fences, part of which invention is applicable to straining wires and to other straining purposes." *Provisional protection only.*

STURGEON.
7th June 1867.

1668. THOMAS STURGEON, of Manchester, in the County of Lancaster, Engineer, for an invention for—"An improvement in street and similar lamps." *Provisional protection only.*

GIOJOLA.
GRAY.
MARTINENGO.
7th June 1867.

1669. CHARLES EMILE GIOJOLA, JAMES HOPFFE GRAY, and PHILIP MARTINENGO, all of Birmingham, in the County of Warwick, for an invention for—"Improvements in inkstands." *Letters Patent sealed.*

ELVINS.
7th June 1867.

1670. AMOS ELVINS, of No. 41, Queen's Road, Bayswater, in the County of Middlesex, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

BRICKNELL.
7th June 1867.

1671. AUGUSTUS LEA BRICKNELL, of Stratford-on-Avon, in the County of Warwick, for an invention for—"Improvements in rotary pumps." *Letters Patent sealed.*

OFFORD.
7th June 1867.

1672. JOSEPH OFFORD, of Wells Street, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in means or apparatus for signalling between different parts of railway trains." *Provisional protection only.*

CROWE.
7th June 1867.

1673. HENRY CROWE, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in hot-water apparatus for heating and warming purposes." *Provisional protection only.*

ATKINSON.
7th June 1867.

1674. EDWIN SENIOR ATKINSON, of Hill Top, Knottingley, in the West Riding of the County of York, for an invention for—"Improvements in the manufacture or treatment of oakum or other fibrous substances for caulking ships and for other similar purposes." *Letters Patent sealed.*

RORISON.
7th June 1867.

1675. DAVID RORISON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved arrangement of reeds to be used in looms for weaving." *Provisional protection only.*

PETRZYWALSKI.
7th June 1867.

1676. JEAN PETRZYWALSKI, of No. 6, John Street, Adelphi, in the County of Middlesex, Gentleman, for an invention for—"An improved camera obscura." *Letters Patent sealed.*

HUGHES.
7th June 1867.

1677. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by Nathan Adolphus Baldwin, of Milford, in the County of New Haven, State of Connecticut, United States of America.* *Letters Patent sealed.*

WOOD.
WOOD.
7th June 1867.

1678. WILLIAM WILSON WOOD, and JOHN WOOD, both of Don Boiler Works, Sheffield, in the County of York, for an invention for—"Improvements in the mode of fitting the tubes in the flues of Cornish and other steam-boilers." *Letters Patent sealed.*

SHELDON.
7th June 1867.

1679. JOSEPH SHELDON, of New Haven, Connecticut, United States of America, now of No. 3, Rue Scribe, Paris, in the Empire of France, for an invention for—"Improvements in brushes and in apparatus for manufacturing the same."—*A communication to him from Barnard Lavery, of the City, County and State of New York, United States of America.* *Letters Patent sealed and specification filed by order.*

BARRY. 7th June 1867.

1680. ALFRED BARRY, of Bromley Grove, Shortlands, in the County of Kent, Wharfinger, for an invention for—"An improved mode of and means for communicating motion to cranes, and regulating and controlling the operation of the same." *Letters Patent sealed.*

OFFORD. 7th June 1867.

1681. JOSEPH OFFORD, of Wells Street, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in wheel carriages and other vehicles." *Provisional protection only.*

TRIBE. 7th June 1867.

1682. WILLIAM TRIBE, of Horndean, in the County of Southampton, District Surveyor, for an invention for—"Improvements in velocipedes or manumotive or pedomotive carriages." *Provisional protection only.*

SCOTT. NIXON. BEAUMONT. 7th June 1867.

1683. ROBERT SCOTT, the younger, JOSEPH NIXON, and JOHN BEAUMONT, all of Dumfries, in the Kingdom of Scotland, Woollen Cloth Manufacturers, for an invention for—"Improvements in the manufacture of certain descriptions of woollen cloths." *Provisional protection only.*

WARBURTON. 7th June 1867.

1684. JAMES WARBURTON, of Hythe, in the County of Kent, for an invention for—"Improvements in apparatus for registering and recording the quality of gas." —*A communication to him from abroad by Christopher Friedleben, of Offenbach, Germany.* *Letters Patent sealed.*

HORTON. 8th June 1867.

1685. JOSHUA HORTON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Certain improvements in the manufacture of tubular 'flyers' employed in spinning and twisting fibrous materials." *Provisional protection only.*

PARKER. 8th June 1867.

1686. HENRY PARKER, of No. 7, Robinson's Terrace, Stratford New Town, Essex, for an invention for—"Improvements in the construction of tobacco pipes." *Letters Patent sealed.*

GLISENTI. 8th June 1867.

1687. FRANCISCO GLISENTI, Manufacturer of Fire-arms, of Brescia (Italy), for an invention for—"Improvements in the manufacture of gun-barrels." *Provisional protection only.*

COLLIER. HOWARTH. CRYER. 8th June 1867.

1688. JAMES COLLIER, Foreman, RALPH HOWARTH, Machinist, and WILLIAM CRYER, Machinist, all of Bolton-le-Moors, in the County of Lancaster, for an invention for—"Improvements in machinery for knitting healds." *Provisional protection only.*

RALSTON. 8th June 1867.

1689. JOHN CLEMENTS RALSTON, of the Firm of Ralston and Clements, Soap and Candle Manufacturers, of Newry, in the County of Armagh, Ireland, for an invention for—"Improvements in machinery or apparatus for making candles by dipping, and in the self-feeding of the tallow vessel or mould thereof." *Letters Patent sealed.*

WILLIS. RICE. MAXFIELD. 8th June 1867.

1690. HENRY WILLIS, of the City of Worcester, Boot and Shoe Manufacturer, and GEORGE RICE, also of the City of Worcester, Tailor and Draper, and ARTHUR MAXFIELD, of Birmingham, in the County of Warwick, Machinist, for an invention for—"Improvements in sewing-machines and in apparatus connected therewith." *Provisional protection only.*

HARGREAVES. 8th June 1867.

1691. JAMES HARGREAVES, of Appleton within Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in obtaining motive-power." *Letters Patent sealed.*

TURNER. DUNNETT. 8th June 1867.

1692. JOHN TURNER, and ROBERT BUCHANAN DUNNETT, of Liverpool, in the County of Lancaster, Stationers, for an invention for—"An improved stamping machine." *Letters Patent sealed.*

BARRETT. LEGGOTT. 8th June 1867.

1693. OBADIAH BARRETT, and HENRY LEGGOTT, of Bradford, in the County of York, for an invention for—"An improved knife cleaner." *Provisional protection only.*

THOMPSON. 8th June 1867.

1694. NATHAN THOMPSON, of No. 15, Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in unions or apparatus for connecting together pipes or tubes, and for stopping the ends thereof." *Provisional protection only.*

PARKES. 8th June 1867.

1695. ALEXANDER PARKES, of Birmingham, for an invention for—"Improvements in ornamenting surfaces of paper, woven fabric and other material to render them suitable for bookbinding and other similar uses." *Letters Patent sealed.*

PEPYS.
WARBURTON.
8th June 1867.

1696. ROBERT EDWARD PEPYS, of 22, Poultry, in the City of London, Cutler, and JAMES WARBURTON, of Hythe, in the County of Kent, for an invention for —"Improvements in apparatus for securing cords and straps such as are used for raising and lowering window blinds, ventilators, carriage windows and for other similar purposes." *Letters Patent sealed.*

ROLLE.
8th June 1867.

1697. HENRY ROLLE, of Boston, Massachusetts, United States of America, for an invention for—"An improved propeller for steamships and other vessels." *Complete specification; Letters Patent sealed.*

CROMPTON.
10th June 1867.

1698. JAMES CROMPTON, of Bolton, in the County of Lancaster, Engineer, for an invention for—"Apparatus for and modes of revivifying malt liquors and other beverages, and for warming them." *Provisional protection only.*

FRENCH.
10th June 1867.

1699. WILLIAM FRENCH, of Keppel Mews North, Russell Square, in the County of Middlesex, for an invention for—"Improvements in roughing horses and other animals." *Letters Patent sealed.*

MACINTOSH.
10th June 1867.

1700. JOHN MACINTOSH, of North Bank, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in the application of plastic and fibrous materials to the manufacture of moulded or formed articles." *Provisional protection only.*

ROBINSON.
PIERCE.
10th June 1867.

1701. THOMAS ROBINSON, of Widnes, in the County of Lancaster, Ironfounder, and JOHN PIERCE, of Warrington, in the same County, Zinc Smelter, for an invention for —"Improvements in apparatus employed in the manufacture of zinc." *Provisional protection only.*

DOWIE.
MCINTYRE.
10th June 1867.

1702. ANDREW LINMERE DOWIE, Merchant, and ROBERT MCINTYRE, Brassfounder, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in apparatus for punching, cutting and embossing." *Provisional protection only.*

KERLY.
10th June 1867.

1703. JOHN HAMPDEN KERLY, of Percival Street, Clerkenwell, in the County of Middlesex, Lapidary, for an invention for—"Improvements in fastenings for brooches." *Provisional protection only.*

DŒRING.
10th June 1867.

1704. FREDERICK BERNARD DŒRING, of Duke Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in engines for boring rock, cutting coal, and boring, cutting or working in other material, and in stands or frames for such engines, the improvements in engines being partly applicable to other purposes." *Letters Patent sealed.*

CONOLLY.
10th June 1867.

1705. JAMES CONOLLY, of Ramsgate, in the County of Kent, for an invention for—"Improvements in machinery or apparatus for obtaining motive-power and applying the same to vehicles on common roads and to other useful purposes." *Provisional protection* NOT *granted.*

HOLT.
10th June 1867.

1706. THOMAS HOLT, of Trieste, in the Empire of Austria, but now residing at the Terminus Hotel, in the Borough of Southwark, Engineer, for an invention for—"Improvements in the construction of steam-boilers." *Letters Patent sealed.*

ORR.
10th June 1867.

1707. WILLIAM ORR, of Greenock, in the County of Renfrew, North Britain, Sugar Refiner, for an invention for—"Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar." *Letters Patent sealed.*

LOGAN.
10th June 1867.

1708. ROBERT LOGAN, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in securing and adjusting windows, blinds and shades, doors and shutters, and in the apparatus employed therefor." *Letters Patent sealed.*

HORNSBY.
BONNALL.
SHIELD.
11th June 1867.

1709. RICHARD HORNSBY, of Spittlegate Iron Works, in the County of L[illegible] Agricultural Engineer, JOHN BONNALL, of Spittlegate Iron Works aforesaid, Engineer, and HENRY SHIELD, of Spittleg[illegible] invention for—"Improvements in t[illegible] ing and separating grain, and in [illegible] purposes."

BONNEVILLE. 11th June 1867.

1710. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for —"Improvements in vessels more particularly such as are used for the reception or deposit or both of offal, excrement, urine or other fecal or waste matter or substances." —*A communication from Andrew Rankin, a person resident at New York City, in the State of New York, United States of America.* *Provisional protection only.*

TOFT. 11th June 1867.

1711. CHARLES TOFT, of Handsworth, in the County of Stafford, Modeller, for an invention for—"Improvements in cruet frames, liquor frames, pickle frames, and other frames for holding bottles and vessels, and in the bottles and vessels to be held in the said frames." *Provisional protection only.*

GRAHAM. 11th June 1867.

1712. JAMES GRAHAM, of Banford, Gilford, County Down, Ireland, for an invention for—"An improved mixture or composition for bleaching vegetable fibres." *Letters Patent sealed.*

FLETCHER. 11th June 1867.

1713. HENRY FLETCHER, of 39, Old Hall Street, Liverpool, for an invention for —"Improvements in the manufacture of artificial fuel." *Letters Patent sealed.*

JOHNSON. 11th June 1867.

1714. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein."—*A communication to him from abroad by Hippolyte Ulysse Petin and Jean Marie Gaudet, of the firm of Petin, Gaudet and Company, of Rive de Gier, in the Empire of France, Ironmasters.* *Letters Patent sealed.*

HILL. 11th June 1867.

1715. GEORGE PHILIP HILL, of Wood Street, in the City of London, Trimming Manufacturer, for an invention for—"Improvements in boxes, drawers and other like receptacles." *Provisional protection only.*

THOM. 11th June 1867.

1716. JAMES THOM, of Hull, in the County of the Town or Borough of Kingston-upon-Hull, Mechanic, for an invention for—"Improvements in apparatus to be employed in expressing oils and fatty matters." *Letters Patent sealed.*

WOOD. 11th June 1867.

1717. STEPHEN WELLS WOOD, of Cornwall, in the County of Orange and State of New York, United States of America, for an invention for—"Improvements in apparatus for elevating or moving grain, and for weighing and moving grain." *Complete specification; Letters Patent sealed.*

FLETCHER. 11th June 1867.

1718. JOHN FLETCHER, of Bow, in the County of Middlesex, Engineer, for an invention for—"Improvements in the construction of retorts for manufacturing and reburning animal charcoal." *Letters Patent sealed.*

ROWAN. 11th June 1867.

1719. WILLIAM ROWAN, of the firm of John Rowan and Sons, of Belfast, in the County of Antrim, Engineers, for an invention for—"Improvements in machinery for heckling or cleaning flax, hemp and other fibrous material, and for preparing the same for spinning." *Letters Patent sealed.*

FULLER. 11th June 1867.

1720. JOHN CRISP FULLER, of Bow, in the County of Middlesex, Electrician and Telegraph Engineer, for an invention for—"An improvement in telegraphic insulators and in caps or shields for the same." *Letters Patent sealed.*

MILLWARD. 12th June 1867.

1721. JOHN MILLWARD, of Birmingham, in the County of Warwick, Civil Engineer, for an invention for—"A combined step cover and wheel fender for carriages and other vehicles."—*A communication to him from abroad by John Wood Gosling, of Cincinnati, State of Ohio, United States of America.* *Letters Patent sealed.*

BOËTIUS. EICHHORN. 12th June 1867.

1722. JOAN FREDERICK BOËTIUS, and JACOB EICHHORN, of 7, Delahay Street, Westminster, in the County of Middlesex, Civil Engineers, for an invention for—"Improvements in the manufacture of type for printing."—*A communication to them from abroad by Eduard Heinrich Mayer, of Cologne, in the Kingdom of Prussia.* *Provisional protection only.*

COCHRANE. 12th June 1867.

1723. JOHN COCHRANE, of the Grange, Stourbridge, in the County of Worcester, for an invention for—"An improved pontoon bridge also applicable as a life raft and lighter."—*A communication to him from abroad by John Wright, of the City and State of New York, United States of America.* *Letters Patent sealed.*

ABEL. 12th June 1867.

1724. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improved appliances for horse-shoes as a substitute for 'roughing.'"—*A communication to him from abroad by Friedrich Dominick, of Berlin, Kingdom of Prussia.* *Provisional protection only.*

CRICHTON. DONBAVAND. CRIGHTON. 12th June 1867.

1725. DAVID CRICHTON, WILLIAM DONBAVAND, and DUNCAN CRIGHTON, of the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

FROST. 12th June 1867.

1726. FREDERICK DUNCH FROST, of the firm of Frost Brothers, of London Street, in the City of London, Rope Manufacturers, for an invention for—"An improvement in rollers used in frames for drawing and spinning or preparing fibrous materials." *Provisional protection only.*

SNELSON. 12th June 1867.

1727. JOSEPH HALFORD SNELSON, of Ashby-de-la-Zouch, in the County of Leicester, Carriage Builder, for an invention for—"Improvements in axles and boxes, and in securing wheels thereto." *Provisional protection only.*

CLARK. 12th June 1867.

1728. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture and treatment of white lead, and in apparatus connected therewith."—*A communication to him from abroad by Robert Griffith Hatfield, of New York City, in the United States of America.* *Letters Patent sealed.*

PRIDEAUX. 13th June 1867.

1729. THOMAS SYMES PRIDEAUX, of 209, Piccadilly, in the County of Middlesex, for an invention for—"Improving wine on draught, and of apparatus to be used for this object, which invention is also applicable to other liquids." *Letters Patent sealed.*

HUGHES. 13th June 1867.

1730. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the manufacture of brushes and in the machinery or apparatus employed therein."—*A communication to him from abroad by Lewis McDonald Hills, of New Haven, in the County of New Haven, State of Connecticut, United States of America.* *Letters Patent sealed.*

LION. 13th June 1867.

1731. AUGUSTE CAHEN LION, of Paris, France, Jeweller, for an invention for—"Improvements in the manufacture of chains, bracelets, necklaces and other similar articles of jewelery." *Letters Patent sealed.*

HOLMES. 13th June 1867.

1732. JOHN HOLMES, of Wapping Road, Bradford, in the County of York, for an invention for—"An improved combination of materials to be used in the manufacture of 'drain bottoms,' flue slabs, bricks and other like purposes." *Letters Patent sealed.*

BAKER. LINDLEY. 13th June 1867.

1733. FRANCIS BRYAN BAKER, and LEONARD LINDLEY, Lace Dyers and Dressers, both of Sherwood Street, Nottingham, for an invention for—"Improvements in stretching or tentering, and in dressing or finishing lace or other fabrics, and in machinery or apparatus employed therein." *Letters Patent sealed.*

BARTON. 13th June 1867.

1734. ROBERT HYDE BARTON, of Chorley, in the County of Lancaster, Spinner and Manufacturer, for an invention for—"Certain improvements in apparatus to be employed in the preparation of cotton and other fibrous materials." *Letters Patent sealed.*

GLOVER. 13th June 1867.

1735. JOHN GLOVER, of 46, Sekforde Street, Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in furnaces for steam-boilers and other uses." *Letters Patent sealed.*

HANCOCK. 13th June 1867.

1736. SAMUEL HANCOCK, of Friar Lane, Nottingham, for an invention for—"Improvements in apparatus to be used in signalling in and from railway trains." *Letters Patent sealed.*

KING. 14th June 1867.

1737. WILLIAM KING, of Woodside, Finchley, in the County of Middlesex, Plumber, for an invention for—"Improvements in apparatus for communicating between the guard and driver, and passengers and guard of a railway train." *Provisional protection only*

ASKEW. 14th June 1867.

1738. CHARLES ASKEW, of Charles Street, Hampstead Road, in the County of Middlesex, for an invention for—"Improvements in refrigerators for cooling wort and other liquids." *Provisional protection only*

TUDDENHAM. 14th June 1867.

1739. STEPHEN TUDDENHAM, of Lower Marsh, Lambeth, in the County Surrey, for an invention for—"Improvements in the construction and manufacture of iron or metal rail rods or bars for balconies, gates, railings, pillars, standards columns and other useful purposes, and also in the machinery employed therein." *Letters Patent sealed*

McMahon. 14th June 1867.

1740. Donat Edmond McMahon, of the Camp, Aldershot, Lieutenant Military Train, for an invention for—"Improvements in saddles." *Provisional protection only.*

Bryant. 14th June 1867.

1741. Hezekiah Hazard Bryant, of Boston, in the State of Massachusetts, United States of America, for an invention for—"A new and useful fireproof safe." *Complete specification; protection for* six *months only.*

Crow. 14th June 1867.

1742. Sutton Edward Crow, of Stratford, in the County of Essex, for an invention for—"Improvements in apparatus to be used in connection with steam-boiler and other furnaces, to adapt them for burning creosote and other combustible liquids." *Letters Patent sealed.*

Ker. 14th June 1867.

1743. George Ker, of 42, Gabriel's Hill, Maidstone, in the County of Kent, for an invention for—"Improvements in apparatus for drying or finishing garments and fabrics after cleaning or dyeing." *Provisional protection only.*

Fletcher. Carr. 15th June 1867.

1744. James Fletcher, and William Carr, both of Blackburn, in the County of Lancaster, Machinist, for an invention for—"Improvements in or applicable to machines for sizing yarns or threads preparatory to weaving, and also to slubbing and roving frames and to other machines." *Provisional protection only.*

Quin. 15th June 1867.

1745. James Quin, of Fulham Road, Brompton, in the County of Middlesex, Coachman, for an invention for—"A new or improved fire-escape." *Provisional protection only.*

Walker. 15th June 1867.

1746. Thomas Walker, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of a spring hook catch or fastening." *Provisional protection only.*

Onions. 15th June 1867.

1747. John Onions, of Devon Place, Newport, in the County of Monmouth, Engineer and Ironfounder, for an invention for—"Improvements in the manufacture of iron and steel." *Letters Patent sealed.*

McKenzie. 15th June 1867.

1748. George Mc Kenzie, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in the manufacture of illuminating gas." *Letters Patent sealed.*

Sadler. 15th June 1867.

1749. Charles Sadler, of Chiddingfold, near Godalming, in the County of Surrey, Gentleman, for an invention for—"Improvements in furnaces for consuming smoke." *Letters Patent sealed; no specification filed.*

Beard. 15th June 1867.

1750. Richard Beard, of 304B, Oxford Street, in the County of Middlesex, for an invention for—"Improvements in flexible galvanic batteries applicable to medico-electric purposes." *Letters Patent sealed.*

Clark. 15th June 1867.

1751. Alexander Melville Clark, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the means of cooling beverages, also applicable for preserving substances from the action of heat."—*A communication to him from abroad by Auguste Charles Joseph Lengelée, Mechanician, and Paul Fréderic Rozée, Merchant, both of* 29, *Boulevart St. Martin, Paris.* *Provisional protection only.*

Newton. 15th June 1867.

1752. William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the preparation of pulp for the manufacture of paper."—*A communication to him from abroad by Alexander Aussedot, of Rue St. Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

Allix. 15th June 1867.

1753. George Allix, of Saint Heliers, Jersey, Shipwright, for an invention for —"Improvements in drilling machines and hoisting machines." *Provisional protection only.*

Erba. 15th June 1867.

1754. Charles Erba, Chemist, of Milan (Italy), for an invention for—"Improvements on depilation and leather tanning." *Letters Patent sealed.*

Varley. Varley. 15th June 1867.

1755. Cornelius Varley, of 337, Kentish Town Road, in the County of Middlesex, and Samuel Alfred Varley, of 66, Roman Road, Holloway, in the said County of Middlesex, Telegraph Engineers and Contractors, for an invention for—"Improvements in electric telegraphs." *Letters Patent sealed.*

LAKE.
15th June 1867.

1756. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8 Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in saws and saw-teeth."—*A communication to him from abroad by Ira Stillman Brown, Charles Noyes Brown and John Mason Gross, all of Providence, Rhode Island, United States of America.*
Letters Patent sealed.

CLARK.
15th June 1867.

1757. GEORGE CLARK, of No. 29, Arundel Street, Strand, in the County of Middlesex, for an invention for—"Improvements in guns, projectiles and cartridges, and in the construction of the same." *Provisional protection only.*

CROSSLEY.
SUNDERLAND.
15th June 1867.

1758. LOUIS JOHN CROSSLEY, of Willow Hall, near Halifax, and JOSEPH SUNDERLAND, of Halifax, in the County of York, for an invention for—"Improvements in machinery for oiling wool or fibre to prepare it for carding, combing or other treatment." *Letters Patent sealed.*

BARNES.
17th June 1867.

1759. RICHARD WILLIAM BARNES, of the City of Manchester, in the County of Lancaster, Civil Engineer, for an invention for—"Improvements in metallic pens and pen-holders conjointly." *Letters Patent sealed.*

MEIKLEJON.
17th June 1867.

1760. JOHN MEIKLEJON, of Dalkeith, in the County of Mid Lothian, North Britain, for an invention for—"Improvements in machinery or apparatus for lifting, lowering and transporting heavy bodies." *Provisional protection only.*

FLETCHER.
CARR.
17th June 1867.

1761. JAMES FLETCHER, and WILLIAM CARR, both of Blackburn, in the County of Lancaster, Machinists, for an invention for—"Improvements in sewing-machines." *Provisional protection only.*

ABEL.
17th June 1867.

1762. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"An improved apparatus for utilizing the power spent in stopping or retarding the motion of carriages and other vehicles and machinery, as also the power produced by carriages and other vehicles when moving down inclines."—*A communication to him from abroad by Jules Péan, of Sillé le Guillaume, in the Empire of France, Merchant.*
Letters Patent sealed.

JOHNSON.
17th June 1867.

1763. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in wood screws and in the means employed in their manufacture."—*A communication to him from abroad by John Waldron Hoard and Solomon Whipple Young, of Providence, in the State of Rhode Island, United States of America.* *Letters Patent sealed.*

LAKE.
17th June 1867.

1764. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in railway carriages and in brakes for the same."—*A communication to him from abroad by Samuel Augustus Chase, of Boston, Massachusetts, United States of America.*
Complete specification; Letters Patent sealed.

WELCH.
17th June 1867.

1765. JOSEPH WELCH, of Redditch, in the County of Worcester, Watch Maker, for an invention for—"Improvements in swivels for fishing tackle and for other purposes." *Letters Patent sealed.*

BOYCE.
HARRINGTON.
17th June 1867.

1766. JAMES EDWARD BOYCE, of Birmingham, in the County of Warwick, Manufacturer, and ROBERT HARRINGTON, of Birmingham, aforesaid, Warehouseman, for an invention for—"Improvements in umbrellas and parasols."
Letters Patent sealed.

MILLER.
17th June 1867.

1767. FRANCIS BOWYER MILLER, of the City of Sydney, in the Colony of New South Wales, Assayer, for an invention for—"An improved method of toughening brittle gold bullion, of refining alloyed gold, and of separating therefrom any silver they may contain." *Letters Patent sealed.*

LLOYD.
17th June 1867.

1768. ISAAC GRIFFITH LLOYD, of Blaina, near Newport, in the County of Monmouth, for an invention for—"Improvements in machinery for compressing air."
Letters Patent sealed.

BOUSFIELD.
17th June 1867.

1769. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in indicating time by time-keepers."—*A communication to him from abroad by Otto Peez, a person resident at Moinz.* *Letters Patent sealed.*

GRAY.
17th June 1867.

1770. MATTHEW GRAY, of Binswood House, Highbury Hill, Islington, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of electric telegraphic conductors." *Letters Patent sealed.*

GRAY.
GIBSON.
17th June 1867.

1771. MATTHEW GRAY, of Binswood House, Highbury Hill, Islington, in the County of Middlesex, Engineer, and LEMUEL GIBSON, of the India-Rubber, Gutta-Percha and Telegraph Works, Silvertown, in the County of Essex, for an invention for—"Improvements in means or apparatus employed in examining the coating of electrical telegraphic communicators." *Letters Patent sealed.*

GRAY.
17th June 1867.

1772. MATTHEW GRAY, of Binswood House, Highbury Hill, Islington, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of electrical telegraphic conductors and in the means or apparatus employed therein." *Letters Patent sealed.*

COOKE.
17th June 1867.

1773. WILLIAM COOKE, of Liverpool, in the County of Lancaster, Consulting Engineer, for an invention for—"Improvements in means or apparatus for registering the number of passengers carried in omnibuses and other vehicles." *Letters Patent sealed.*

SOWDEN.
STEPHENSON.
17th June 1867.

1774. DAVID SOWDEN, and REUBEN CALVERT STEPHENSON, of Bradford, in the County of York, Machine Makers and Ironfounders, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

TANCRED.
17th June 1867.

1775. SIR THOMAS TANCRED, Baronet, of Rose Wood, Pangbourne, near Reading, in the County of Berks, for an invention for—"Improvements in the construction of beehives."—*The result partly of a communication to him from abroad by Pfarrer Dzierzon, of Carlsmarkt, Silesia, in the Kingdom of Prussia, and partly of invention and discovery made by him.* *Letters Patent sealed.*

WELCH.
17th June 1867.

1776. PATRICK WELCH, of the City and State of New York, United States of America, for an invention for—"An improvement in machinery for rubbing or dressing printers' types." *Letters Patent sealed.*

FAIRLEY.
18th June 1867.

1777. WILLIAM FAIRLEY, of Loughor, near Llanelly, Carmarthenshire, for an invention for—"An improved mechanical arrangement for preventing over-winding in shafts of coal and other mines." *Letters Patent sealed.*

FROST.
18th June 1867.

1778. JOSEPH MARSHALL FROST, of St. Leonard's-on-Sea, in the County of Sussex, Railway Clerk, for an invention for—"Improved means and apparatus for raising sunken vessels, which invention is also applicable for preventing vessels from foundering." *Provisional protection only.*

ABEL.
18th June 1867.

1779. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"An improved repeating striking movement for watches, clocks and timepieces."—*A communication to him from abroad by Robert Theurer, Son and Company, of La Chaux-de-Fonds, Switzerland, Clock Manufacturers.* *Provisional protection only.*

BODMER.
18th June 1867.

1780. RUDOLPH BODMER, of Newport, in the County of Monmouth, Engineer, for an invention for—"An improved method of securing the nuts of bolts." *Provisional protection only.*

EDWARDS.
18th June 1867.

1781. JOB EDWARDS, of Wednesbury, in the County of Stafford, Manufacturer, for an invention for—"Improvements in lifts or cages and tubs for raising minerals from pits or mines and for other like purposes." *Letters Patent sealed.*

BROWN.
18th June 1867.

1782. THOMAS BROWN, of No. 96, Newgate Street, in the City of London, Civil Engineer, for an invention for—"An improved apparatus for holding and lifting plates and dishes."—*A communication to him from abroad by Howard Tilden, of Boston, Massachusetts, United States of America.* *Provisional protection only.*

JONES.
18th June 1867.

1783. JAMES GRAFTON JONES, of Blaina, near Newport, in the County of Monmouth, for an invention for—"Improvements in apparatus to be used for getting coal, stone and other minerals." *Letters Patent sealed.*

THOMSON
18th June 1867.

1784. WILLIAM SPARKS THOMSON, of Cheapside, in the City of London, Manufacturer, for an invention for—"Improvements in the construction of heating and annealing furnaces."—*A communication to him from abroad by The Union Car-Spring Manufacturing Company (Incorporated), of the City of New York, United States of America.* *Provisional protection only.*

LANG. 18th June 1867. **1785.** JOSEPH LANG, of Cockspur Street, in the City of Westminster, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

JONES. 19th June 1867. **1786.** DAVID JONES, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of coal vases, buckets, casks, kegs, bins, baths, sugar funnels and other similar articles of hollow ware." *Letters Patent sealed.*

WAIDE. 19th June 1867. **1787.** FRANCIS WILLIAM WAIDE, of Rotherham, in the County of York, Iron-founder and Stove Grate Manufacturer, for an invention for—"An improved mode of obtaining motive-power." *Provisional protection only.*

SIMON. 19th June 1867. **1788.** LOUIS SIMON, of Hutchinson Street, Wilford Road, in the Town and County of the Town of Nottingham, for an invention for—"A new or improved machine for bronzing." *Letters Patent sealed.*

LYONS. 19th June 1867. **1789.** MORRIS LYONS, of 143, Suffolk Street, Birmingham, in the County of Warwick, for an invention for—"Improvements in making frames for looking glasses, pictures and mouldings." *Provisional protection only.*

COPPARD. 19th June 1867. **1790.** JOHN COPPARD, of 42, Park Street, Upper Street, Islington, in the County of Middlesex, for an invention for—"Closing of doors, windows and other such apertures with a spring, when necessary to close them by such means." *Letters Patent sealed.*

HUGHES. HEAD. 19th June 1867. **1791.** EBENEZER WILLIAM HUGHES, of 5, Queen Square, Westminster, and THOMAS HOWARD HEAD, of 9, Dowgate Hill, in the City of London, for an invention for—"Improvements in rotary engines and pumps." *Provisional protection only.*

PANTER. 19th June 1867. **1792.** ANN LITTLEJOHNS PANTER, of 10, Pakenham Street, Gray's Inn Road, for an invention for—"An improved seat for babies or young children." *Provisional protection only.*

HURRY. 19th June 1867. **1793.** HENRY COLUMBUS HURRY, of Hereford, in the County of Hereford, Civil Engineer, for an invention for—"Improvements in stop-blocks and buffer stops to be used upon railways, part of which improvements is also applicable to the working of points on railways." *Letters Patent sealed.*

MACLELLAN. 19th June 1867. **1794.** WALTER MACLELLAN, of the firm of P. and W. MacLellan, of Glasgow, in the County of Lanark, North Britain, Iron Merchant, for an invention for—"Improvements in railway buffers." *Provisional protection only.*

JOHNSON. 19th June 1867. **1795.** JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the treatment of yarns intended to be printed."—*A communication to him from abroad by Charles Aubry, of Paris, in the Empire of France.* *Letters Patent sealed.*

WHITING. 19th June 1867. **1796.** JAMES EDWARD WHITING, of Victoria Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in the construction of castors." *Provisional protection only.*

JONES. 20th June 1867. **1797.** DAVID JONES, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of bails or handles for articles or vessels of hollow ware." *Letters Patent sealed.*

CLARK. 20th June 1867. **1798.** ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for sewing saddlery and other leather or strong materials."—*A communication to him from abroad by Auguste Jacques Hurtu and Victor Joseph Hautin, Merchants, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

WILSON. 20th June 1867. **1799.** THOMAS WILSON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in moveable spanners or screw wrenches." *Provisional protection only.*

PERRETT. 20th June 1867. **1800.** FREDERICK GEORGE NEWTON PERRETT, of Somerton, Torquay, in the County of Devon, Surveyor, for an invention for—"Improvements in blind pulleys." *Letters Patent sealed.*

STERNE. 20th June 1867.

1801. LOUIS STERNE, of Old Broad Street, in the City of London, Engineer, for an invention for—"Improvements in chucks or apparatus for holding drills or boring tools."—*A communication to him from abroad by Francis Young, a person resident at Paris, France.* *Provisional protection only.*

STUART. 20th June 1867.

1802. CHARLES STUART, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"An improved arrangement or construction of adjustable wrenches." *Provisional protection only.*

YORK. 20th June 1867.

1803. HENRY KINNAIRD YORK, of Grange Town Ironworks, Cardiff, for an invention for—"Improvements in the manufacture of steel." *Letters Patent sealed.*

RÖBER. 20th June 1867.

1804. HEINRICH GOTTLIEB BERNHARD RÖBER, of 3, Frankfurter Strasse, Braunschweig, for an invention for—"Improvements in the construction of safety box slides." *Letters Patent sealed.*

WARD. DRESSLER. 20th June 1867.

1805. JOHN WARD, of Leicester Square, Patent Invalid Chair Manufacturer, and FREDERICK DRESSLER, of Upper Rathbone Place, Oxford Street, both in the County of Middlesex, for an invention for—"Improvements in easy or invalid chairs." *Letters Patent sealed.*

COCHRAN. 20th June 1867.

1806. JOHN WEBSTER COCHRAN, of the City, County and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in projectiles and cartridges for ordnance and fire-arms." *Provisional protection only.*

CLARKE. 20th June 1867.

1807. WILLIAM CLARKE, of Raleigh House, Nottingham, Lace Manufacturer, for an invention for—"Improvements in the production of ornamental textile fabrics." *Letters Patent sealed.*

PERKINS. 21st June 1867.

1808. JOHN WILLIAM PERKINS, of 32, Great St. Helen's, in the City of London and County of Middlesex, for an invention for—"Improvements in stills for petroleum, parraffine oil, tar, turpentine and like bodies." *Provisional protection only.*

ROBERTSON. WADDELL. 21st June 1867.

1809. WILLIAM ROBERTSON, and CHARLES JAMES WADDELL, both of 17, Queen's Chambers, Market Street, in the City of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in the apparatus by which the oscillations of the comb in the carding-engine, the knife in the cotton gin, and the saw in the reaping machine or reciprocating saw, may be readily multiplied." *Provisional protection only.*

ORAM. 21st June 1867.

1810. HENRY ORAM, of Lark Hill, in the Parish of Bury and County of Lancaster, for an invention for—"Improvements in machines for sewing and stitching." *Complete specification; Letters Patent sealed.*

BROWNE. 21st June 1867.

1811. BENJAMIN BROWNE, of 49, King William Street, in the City of London, Civil Engineer and Patent Agent, for an invention for—"Improvements in the construction of camp or folding bedsteads."—*A communication to him from abroad by Robert Clegg, of 40, Boulevard de Sebastopol, Paris, in the Empire of France.* *Provisional protection only.*

GARDNER. 21st June 1867.

1812. JAMES GARDNER, of Newington, in the County of Surrey, for an invention for—"Improvements in the construction of folding bedsteads and couches." *Provisional protection only.*

POWIS. JAMES. 21st June 1867.

1813. JOHN POWIS, and JABUS STANLEY JAMES, of Victoria Works, Belvedere Road, Lambeth, in the County of Surrey, Engineers, for an invention for—"Improvements in tenon cutting machines." *Provisional protection only.*

BELLHOUSE. 21st June 1867.

1814. WILLIAM BELLHOUSE, of Rochdale, in the County of Lancaster, Mechanician, for an invention for—"Improvements in furnaces for consuming smoke, applicable to steam-boilers and other furnaces." *Provisional protection only.*

CLARK. 21st June 1867.

1815. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for measuring horses' feet and for adapting and fitting shoes thereto."—*A communication to him from abroad by Auguste Clément, Veterinary Surgeon, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

HENNET. SPINK. 21st June 1867.

1816. FOLLETT CHARLES HENNET, and DANIEL SPINK, both of Bridgewater Iron Works, Bridgewater, in the County of Somerset, Engineers, for an invention for —"Improvements applicable to apparatus for raising and lowering weights, for indicating and registering the amount lifted, or for indicating only the said weight." *Provisional protection only.*

FORD. FORD. 21st June 1867.

1817. BENJAMIN FORD, and THOMAS FORD the younger, both of Wednesfield Heath, in the County of Stafford, Manufacturers, for an invention for—"Improvements in water tuyeres." *Provisional protection only.*

PRICE. 21st June 1867.

1818. WILLIAM PRICE, of Birmingham, in the County of Warwick, Die Forger, for an invention for—"Improvements in the manufacture of dies for stamping." *Provisional protection only.*

DICKIE. 21st June 1867.

1819. GEORGE DICKIE, of Kilwinning, in the County of Ayr, North Britain, for an invention for—"Improvements in the manufacture of illuminating gas." *Letters Patent sealed.*

SIMPSON. 21st June 1867.

1820. GEORGE SIMPSON, of Whitburn, in the County of Linlithgow, North Britain, for an invention for—"Improvements in charging and emptying retorts, and in the machinery or apparatus employed therefor." *Provisional protection only.*

REDDICLIFFE. 21st June 1867.

1821. FRANCIS REDDICLIFFE, of Seglenlas Mine, Llanidloes, in the County of Montgomery, Mine Agent, for an invention for —"Improvements in buckets for pumps, especially suitable for pumps for mines, and in pistons for steam and other engines." *Letters Patent sealed.*

MCCLINTOCK. 21st June 1867.

1822. EMORY MCCLINTOCK, of the Langham Hotel, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction of motive-power engines and pumps." *Letters Patent sealed.*

ONSLOW. NORTHALL. 22nd June 1867.

1823. JOHN ONSLOW, of Darby End, in the County of Worcester, Refiner, and FRANCIS NORTHALL, of Netherton, in the same County, Engineer, for an invention for—"Certain improvements in the construction of water tuyeres." *Provisional protection only.*

CHASE. 22nd June 1867.

1824. OLIVER RICE CHASE, of No. 25, Montague Street, Russell Square, in the County of Middlesex, Civil Engineer, for an invention for—"An improved combined feed-water regulator and water guage for steam-boilers."—*A communication to him from abroad by Lewson E. Chase, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

MORRELL. 22nd June 1867.

1825. ROBERT WILSON MORRELL, of the Town of Bradford, in the County of Yorkshire, Merchant, for an invention for—"Improvements in dyeing black upon certain mixed textile fabrics made of worsted, alpaca or mohair woven in combination with cotton, and known generally in the trade as 'Bradford goods.'" *Complete specification; Letters Patent sealed.*

CLARK. 22nd June 1867.

1826. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in nippers."—*A communication to him from abroad by William Scott Millar, Thomas Greenman Hall and Albert Michelsberg, all of New York City, United States of America.* *Letters Patent sealed.*

HOLMAN. 22nd June 1867.

1827. STEPHEN HOLMAN, of No. 10, Laurence Pountney Lane, London, in the County of Middlesex, Engineer, for an invention for—"Improvements in double-action pumps and in the methods of operating pumps, part of which improvements are applicable to other reciprocating machines." *Letters Patent sealed.*

WILSON. HALL. 22nd June 1867.

1828. THOMAS WILSON, and WILLIAM HALL, both of the Town and County of the Town of Newcastle-upon-Tyne, Engineers, for an invention for—"Improvements in machinery or apparatus for raising and forcing water and other fluids." *Letters Patent sealed.*

SURRIDGE. 22nd June 1867.

1829. JOSEPH SURRIDGE, of Cogan Hall, in the Parish of Cogan, in the County of Glamorgan, Farmer, for an invention for—"Improvements in anchors suitable for steam ploughs and implements." *Provisional protection only.*

HALL. PARSONS. 22nd June 1867.

1830. SYDNEY HALL, Civil Engineer, of Swansea, and WILLIAM HENRY PARSONS, Machinist, of the same place, for an invention for—"Improvements in apparatus for moulding artificial fuel." *Letters Patent sealed.*

DE COSENTINO. 22nd June 1867.

1831. JOSEPH LONGO VINCHIATURO LE MARQUIS DE COSENTINO, of Charing Cross Hotel, Strand, in the County of Middlesex, for an invention for—"Improvements in apparatus for obtaining motive-power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams."—*A communication to him from abroad by Louis Roman, a person resident at Rue de Seine, Paris, in the Empire of France.* *Provisional protection only.*

KEARNS. 24th June 1867.

1832. JOHN HENRY KEARNS, of 20, Benet's Hill, St. Paul's, in the City of London, for an invention for—"A diary blotting pad." *Complete specification; Letters Patent sealed.*

BIRCH. 24th June 1867.

1833. JOHN BIRCH, of Newton Heath, in the County of Lancaster, Steel Converter, for an invention for—"Certain improvements in casting ingots of Bessemer or other steel." *Provisional protection only.*

RAFFERTY. STOREY. 24th June 1867.

1834. THOMAS RAFFERTY, of Manchester, in the County of Lancaster, Gas Engineer, and JOHN HENRY STOREY, of the same place, Brassfounder, for an invention for—"An improved apparatus to be employed in moving from place to place, laying down and jointing metal pipes." *Letters Patent sealed.*

LEAHY. 24th June 1867.

1835. EDMUND LEAHY, Civil Engineer, of 21, Cardington Street, Euston Square, London, for an invention for—"An improved solid cartridge case." *Provisional protection only.*

FIELD. 24th June 1867.

1836. JOHN KINGSFORD FIELD, of the firm of John, Charles and John Field, of Upper Marsh, Lambeth, in the County of Surrey, for an invention for—"Improvements in the manufacture of candles." *Letters Patent sealed.*

GLEASON. 24th June 1867.

1837. ELLIOTT PERRY GLEASON, of the City and County of New York, in the State of New York, and United States of America, Gentleman, for an invention for—"Improvements in cylindrical or 'Argand' gas burners." *Letters Patent sealed.*

CLERC. 24th June 1867.

1838. LÉON CHARLES FRANÇOIS CLERC, of Saint Mary Axe, in the City of London, for an invention for—"Improvements in lamp burners for burning petroleum, spirit and other highly volatile liquids." *Provisional protection only.*

NEWTON. 24th June 1867.

1839. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in governors for marine engines."—*A communication to him from abroad by Farcot et ses fils, of Boulevard Beaumarchais, Paris, in the Empire of France.* *Letters Patent sealed.*

CAPPER. READ. 24th June 1867.

1840. ROBERT CAPPER, of Mincing Lane, in the City of London, Gentleman, and GEORGE READ, of Deal, in the County of Kent, Chief Officer, R.N., for an invention for—"An improved arrangement of ships' signal lights." *Provisional protection only.*

RUSHTON. 24th June 1867.

1841. HENRY RUSHTON, of 23, Charlotte Terrace, Barnsbury, in the County of Middlesex, for an invention for—"Improvements in the manufacture of artificial hair." *Letters Patent sealed.*

DENTON. 24th June 1867.

1842. HENRY RICHARD JOHN DENTON, of Wolverhampton, Agricultural Implement Maker, for an invention for—"Improvements in hay-making machines." *Provisional protection only.*

PEBARDY. 25th June 1867.

1843. THOMAS PEBARDY, of 30, Saint Paul's Road, in the Parish of Saint Pancras, in the County of Middlesex, Surgical Bandage and Instrument Maker, for an invention for—"Improvements in surgical appendages, to consist of a corset and abdominal supporter combined, also to serve as a truss in cases of umbilical and ventral hernia." *Provisional protection only.*

WILKINSON. GRIMSHAW. 25th June 1867.

1844. JOSEPH WILKINSON, and WILLIAM GRIMSHAW, both of Sheffield, in the County of York, for an invention for—"Improvements in watches." *Letters Patent sealed.*

WEBSTER. 25th June 1867.

1845. JAMES WEBSTER, of Birmingham, in the County of Warwick, Engineer, for an invention for—"A new metallic zinc paint." *Letters Patent sealed.*

CROW. 25th June 1867.

1846. THOMAS CROW, of West Ham, in the County of Essex, Tar Distiller, for an invention for—"Improvements in the manufacture of illuminating gas from gas tar oil or from gas tar." *Letters Patent sealed.*

WHITING.
25th June 1867.

1847. JAMES EDWARD WHITING, of Victoria Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in apparatus for transmitting power or motion." *Letters Patent sealed.*

HÖÖK.
25th June 1867.

1848. FRIDOLPH HÖÖK, of Ekenäs, in the Grand Duchy of Finland, Master Mariner, for an invention for—"Improvements in reefing and furling upper top-sails." *Provisional protection only.*

AITCHISON.
SOUTH.
25th June 1867.

1849. ADAM AITCHISON, of No. 6, Park Terrace, Peckham, in the County of Surrey, and THOMAS SOUTH, of Bridge Street, Southwark, in the said County, Gas Engineers, for an invention for—"Improvements in means or apparatus for the production of gas for illuminating and other uses from hydrocarbons, which apparatus is also adapted to be used for culinary and other heating purposes." *Letters Patent sealed.*

BRUNETTI.
25th June 1867.

1850. LUDOVICO BRUNETTI, of Rovigno (Italy), Professor, for an invention for—"An improved process of embalming and preserving animal substances from decay, for anatomical purposes." *Provisional protection only.*

WATTS.
FLEETWOOD.
25th June 1867.

1851. WILLIAM THOMAS WATTS, of Birmingham, in the County of Warwick, Metal Dealer, and DANIEL JOSEPH FLEETWOOD, of the same place, Manufacturer, for an invention for—"Improvements in the manufacture of hollow vessels, and dished, sunken or tubular shapes or forms in metal or other material capable of being moulded." *Letters Patent sealed.*

BUCKINGHAM.
25th June 1867.

1852. JAMES BUCKINGHAM, Civil Engineer, of Westmoreland Works, Walworth Common, London, S., for an invention for—"An improved tool for opening metallic cases."—*A communication to him from abroad by Mr. A. Hilger, Engineer, of 16, Boulevard St. Jaques, Paris.* *Provisional protection* NOT *granted.*

VEILLON.
25th June 1867.

1853. HENRY VEILLON, of Toulouse, in the Empire of France, at present residing at 33, Upper Stamford Street, Blackfriars Road, in the County of Surrey, for an invention for—"Improvements in hot-air ovens for baking bread, biscuits, pastry, cooking, drying or desiccating flour and other materials." *Letters Patent sealed.*

ALSTON.
25th June 1867.

1854. GAVIN ALSTON, of Glasgow, in the County of Lanark, North Britain, Cabinet Maker, for an invention for—"Improvements in the means of consuming smoke in furnaces and other fire-places." *Provisional protection only.*

COOKE.
25th June 1867.

1855. WILLIAM COOKE, of Paddington, in the County of Middlesex, Carpenter, for an invention for—"Improved apparatus for hoisting building materials." *Provisional protection only.*

MAURY.
26th June 1867.

1856. MATTHEW FONTAINE MAURY, of No. 3, Belsize Square, London, N.W., for an invention for—"An improved method of protecting submarine cables when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out." *Provisional protection only.*

TAYLOR.
26th June 1867.

1857. THOMAS TAYLOR, of No. 7, Wellington Row, Bethnal Green, in the County of Middlesex, for an invention for—"New or improved implements or apparatus for playing games of skill and chance." *Provisional protection only.*

HUMAN.
26th June 1867.

1858. JOSIAH HUMAN, Civil Engineer, of 33, Osnaburgh Street, Euston Road, London, County of Middlesex, for an invention for—"Improvements in breech-loading cannon and fire-arms." *Letters Patent sealed.*

EADIE.
26th June 1867.

1859. ROBERT EADIE, of Blaydon Iron Works, Newcastle-upon-Tyne, Engineer, for an invention for—"Improvements in axles." *Provisional protection only.*

NEWTON.
26th June 1867.

1860. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in filtering apparatus."—*A communication to him from abroad by Albert Ludwig Georg Dehne, of Halle, in the Kingdom of Prussia.* *Letters Patent sealed.*

FORLONG.
26th June 1867.

1861. RICHARD PANNELL FORLONG, of Bristol, in the County of Gloucester, Manufacturer, for an invention for—"Improvements in the means of consuming smoke in furnaces." *Provisional protection only.*

GRAY.
SINCLAIR.
26th June 1867.

1862. WILLIAM BENJAMIN GRAY, and SAMUEL GIBSON SINCLAIR, both of Whiteabbey, in the County of Antrim, Gentleman, for an invention for—"Improvements in spinning and twisting machines." *Provisional protection only.*

LAKE.
26th June 1867.

1863. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in churns."—*A communication to him from abroad by William Hookes Tambling, of Mazo, Maine, Wisconsin, United States of America.* *Complete specification; Letters Patent sealed.*

LAKE.
26th June 1867.

1864. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in cotton gins."—*A communication to him from abroad by Charles Spofford and Charles Henry Hersey, both of Boston, Massachusetts, United States of America.*
Complete specification; Letters Patent sealed.

FRANKLIN.
26th June 1867.

1865. ALEXANDER CAESAR FREDERICK FRANKLIN, of No. 4, Princes Square, Bayswater, for an invention for—"Improvements in steam-engines."
Letters Patent sealed.

WHELE.
27th June 1867.

1866. EDWIN WHELE, of Victoria Road, Aston, near Birmingham, in the County of Warwick, Engineer, for an invention for—"An improved method of guaging and cutting soap." *Provisional protection only.*

ROWE.
27th June 1867.

1867. JOSEPH GRINDLEY ROWE, of 5, Queen Square, Westminster, for an invention for—"Improvements in railway signals, point apparatus and lamps."
Letters Patent sealed.

GEDGE.
27th June 1867.

1868. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An economical system of raising running waters with apparatuses fixed or carried on boats, and without dams or steam-engines, but by the simple use of the force produced by the current of a river or watercourse."—*A communication to him from abroad by Alphonse Lalauze, of St. Peray (Ardèche), France, Advocate.*
Provisional protection NOT *granted.*

MCEWEN.
27th June 1867.

1869. JAMES MCEWEN, of Glasgow, in the County of Lanark, North Britain, Tobacco Manufacturer, for an invention for—"Improvements in the manufacture of roll tobacco and in apparatus therefor." *Provisional protection only.*

GABBOTT.
27th June 1867.

1870. JAMES GABBOTT, of Blackburn, in the County of Lancaster, Commission Agent, for an invention for—"Improved machinery or apparatus to be employed in the manufacture of wire healds for looms for weaving." *Letters Patent sealed.*

BULLOUGH.
27th June 1867.

1871. WILLIAM BULLOUGH, of Blackburn, in the County of Lancaster, Engineer, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

CASH.
CASH.
27th June 1867.

1872. JOHN CASH, and JOSEPH CASH, junior, both of the City of Coventry, Manufacturers, for an invention for—"An improved apparatus for winding bands or tapes." *Provisional protection only.*

FARRINGTON.
27th June 1867.

1873. ERNEST FARRINGTON, of Rue du Chemin Vert, No. 28, Paris, Engineer, for an invention for—"Improvements in breech-loading fire-arms and in the manufacture of cartridges to be used therewith." *Provisional protection only.*

BROOMAN.
27th June 1867.

1874. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"An improved regulating 'jupon.'"—*A communication to him from abroad by Paul de Plument de Bailhac, of Paris, France.* *Letters Patent sealed.*

NEWTON.
27th June 1867.

1875. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus for the manufacture of iced beverages."—*A communication to him from abroad by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle, of Boulevard Beaumarchais, Paris, in the Empire of France.*
Letters Patent sealed.

TAYLOR.
27th June 1867.

1876. MOSES HORROCKS TAYLOR, of Littleborough, in the County of Lancaster, Ironmonger, for an invention for—"Improvements in tuyeres for smiths' hearths."
Provisional protection only.

HODGSON.
27th June 1867.

1877. WILLIAM HODGSON, of Bradford, in the County of York, Machine and Tool Maker, for an invention for—"Improvements in 'screw-gill boxes' for preparing wool and other fibrous substances." *Provisional protection only.*

POWNALL. 27th June 1867.

1878. CHARLES JAMES POWNALL, of Twickenham, in the County of Middlesex, Esquire, for an invention for—"Improvements in the means of communicating intelligence between parts of railway trains." *Provisional protection only.*

LAKE. 27th June 1867.

1879. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved self-detaching coupling for railway carriages."—*A communication to him from abroad by Ernest Von Jeinsen, of the City and State of New York, United States of America.* *Letters Patent sealed.*

LAKE. 27th June 1867.

1880. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in metal ties or bands for securing bales of cotton or other substance."—*A communication to him from abroad by Richard G. Latting, of New Orleans, Louisiana, United States of America.*
Complete specification; Letters Patent sealed.

COOPER. 27th June 1867.

1881. JOSEPH ROCK COOPER, of Birmingham, in the Couny of Warwick, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms."
Letters Patent sealed.

DAVIS. 27th June 1867.

1882. WILLIAM DAVIS, of Gainford, in the County of Durham, Gentleman, for an invention for—"Improvements in the method of fastening and securing the overlapping parts of envelopes for enclosing letters and other matters."
Provisional protection only.

ELLIOT. 28th June 1867.

1883. LEWIS BROWN ELLIOT, of Moulton, in the County of Northampton, for an invention for—"An improved delivery to a reaping or mowing machine."
Provisional protection only.

MARSHALL. 28th June 1867.

1884. WILLIAM MARSHALL, of the Town and County of the Town of Nottingham, for an invention for—Improvements in the construction and production of bedsteads, couches or sofas and other similar articles." *Letters Patent sealed.*

VITON. 28th June 1867.

1885. JOSEPH HÉLÈNE VITON, of 15, Passage des Petites Ecuries, Paris, in the Empire of France, Commission Agent, for an invention for—"An improved method of adapting paper linings to the interior of casks, cases and packages of various descriptions." *Provisional protection only.*

HEYL. 28th June 1867.

1886. CHARLES OTTO HEYL, of Berlin, in the Kingdom of Prussia, Manufacturer, for an invention for—"An improved method of and apparatus for making sulphuret of carbon." *Letters Patent sealed.*

HEYL. 28th June 1867.

1887. CHARLES OTTO HEYL, of Berlin, in the Kingdom of Prussia, Manufacturer, for an invention for—"An improved method of and apparatus for extracting fatty matters from and for scouring wool and other fibrous substances and textile fabrics, by the use of sulphuret of carbon, and for regaining the sulphuret used in such operation." *Provisional protection only.*

SELLARS. 28th June 1867.

1888. JOHN CARRINGTON SELLARS, of Birkenhead, in the County of Chester, Manufacturing Chemist, for an invention for—"Improvements in the utilization of a certain waste material obtained in the manufacture of hydrocarbon liquids."
Provisional protection only.

HUGHES. 28th June 1867.

1889. EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics."—*A communication to him from abroad by Seth William Baker, of Providence, Rhode Island, United States of America.*
Provisional protection only.

CLARK. 28th June 1867.

1890. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in presses for stamping or endorsing."—*A communication to him from abroad by Edouard Cornélis, Merchant, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

GEYELIN. 28th June 1867.

1891. GEORGE KENNEDY GEYELIN, Civil Engineer, of Belgrave House, Argyle Square, London, for an invention for—"Improvements in folding wire netting adapted for poultry, sheep and other fencing." *Provisional protection only.*

BROWN.
28th June 1867.

1892. COLIN BROWN, of Glasgow, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in actuating motive-power engines and in the apparatus or means employed therefor." *Letters Patent sealed.*

LYMAN.
28th June 1867.

1893. HENRY ALEXANDER LYMAN, of Cheapside, in the City of London, Manufacturer, for an invention for—"Improvements in the construction of ladies' skirts." *A communication to him from abroad by Thomson, frères, of Paris, in the Empire of France.* *Provisional protection only.*

TONGUE.
28th June 1867.

1894. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"An improvement in adjustable wrenches." *—Acommunication to him from abroad by John Parker Lindsay, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

ANDERSON.
ANDERSON.
28th June 1867.

1895. JOHN ANDERSON, of Bradford, in the County of York, and THOMAS ANDERSON, of the same place, for an invention for—"An improvement in the harness of jacquard engines." *Provisional protection only.*

HOLROYD.
FIELDHOUSE.
28th June 1867.

1896. JAMES HOLROYD, of Leeds, in the County of York, Manufacturer, and WILLIAM FIELDHOUSE, of Batley, also in the County of York, Manufacturer, for an invention for—"An improvement in twisting or doubling machinery for producing a certain species of yarn." *Letters Patent sealed.*

HEYL.
29th June 1867.

1897. CHARLES OTTO HEYL, of Berlin, in the Kingdom of Prussia, Manufacturer, for an invention for—"An improved method of and apparatus for extracting oil or fatty matter from cotton or woollen waste, shoddy, mungo, rags and analogous substances, by means of sulphuret of carbon." *Letters Patent sealed.*

ZAROUBINE.
29th June 1867.

1898. PAUL ZAROUBINE, of the City of Saint Petersburgh, in the Empire of Russia, Gentleman, for an invention for—"An improved sucking and forcing hydro-pneumatic pump with no piston." *Letters Patent sealed.*

SMITH.
29th June 1867.

1899. PERCY SMITH, of the firm of Stallard and Smith, Wine Merchants, of Philpot Lane, in the City of London, for an invention for—"Improvements in corking, stopping and securing the contents of champagne and other bottles."—*A communication to him from abroad by Jeules Fisse and Gustave Thirion, of Rheims, in the Empire of France.* *Letters Patent sealed.*

FELL.
29th June 1867.

1900. ALEXANDER MORRISON FELL, of West Calder, in the County of Midlothian, North Britain, Oil Manufacturer, for an invention for—"Improvements in purifying or preservative compounds to be applied to the fleeces or skins of sheep and other animals." *Provisional protection only.*

FELL.
29th June 1867.

1901. ALEXANDER MORRISON FELL, of West Calder, in the County of Midlothian, North Britain, Oil Manufacturer, for an invention for—"Improvements in batching or treating jute." *Provisional protection only.*

HODGE.
29th June 1867.

1902. ARCHIBALD HODGE, of Glasgow, in the County of Lanark, North Britain, Ironmonger, for an invention for—"Improvements in adjustable appliances for fixing door handles." *Letters Patent sealed.*

COX.
29th June 1867.

1903. HENRY JOHN COX, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of carriage bodies, and which said improvements are also applicable to the manufacture of pleasure and other boats, and other like purposes where great strength and lightness is of importance." *Provisional protection only.*

TRULOCK.
TRULOCK.
TRULOCK.
29th June 1867.

1904. SAMUEL TRULOCK, RICHARD TRULOCK, and WILLIAM TRULOCK, all of Essex Quay, in the City of Dublin, Gun Makers, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

RICHARDSON.
29th June 1867.

1905. WILLIAM HADEN RICHARDSON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"A certain improved mode of manufacturing iron and steel." *Letters Patent sealed.*

STEWART.
29th June 1867.

1906. ALEXANDER STEWART, of Hamilton, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in textile fabrics and in the apparatus or means employed for effecting the same." *Letters Patent sealed.*

LANE. 29th June 1867.	**1907.** JOSEPH JAMES LANE, of Cranbrook Place, Old Ford Road, in the County of Middlesex, Engineer, for an invention for—"Improved machinery for making tapers." *Letters Patent sealed; no specification filed.*
DUBRULLE. 29th June 1867.	**1908.** CHARLES COSSET DUBRULLE, of No. 20, Grande Place, of the City of Lille, Department of the Nord, Empire of France, Lamp Maker, for an invention for —"Improvements in miners' lamps." *Provisional protection only.*
CONLONG. 29th June 1867.	**1909.** JAMES CONLONG, of Blackburn, in the County of Lancaster, for an invention for—"Improvements in expanding and contracting combs or wraiths for warping, beaming, dressing and other frames, and in machinery or apparatus connected therewith." *Provisional protection only.*
PETIT. 29th June 1867.	**1910.** CHARLES PETIT, of Brussels, in the Kingdom of Belgium, Mechanician, for an invention for—"Improvements in lamps for burning petroleum, shale and other mineral oils." *Letters Patent sealed.*
SEPHTON. 29th June 1867.	**1911.** EDWARD SEPHTON, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"Improvements in the construction or arrangement of blocks of so called workmen's dwellings." *Provisional protection* NOT *granted.*
SIMMONS. 29th June 1867.	**1912.** EDWARD SIMMONS, of Stoke Newington, in the County of Middlesex, for an invention for—"Improvements in the construction of screw propellers." *Provisional protection* NOT *granted.*
BROOMAN. 29th June 1867.	**1913.** CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improved means of applying and fixing metals on fabrics, feathers, artificial flowers and other articles."—*A communication to him from abroad by Georges Henri Beraud and Pierre Dugué, both of Paris, France.* *Provisional protection only.*
REES. 29th June 1867.	**1914.** GEORGE REES, of Holloway, in the County of Middlesex, for an invention for—"An improved method of treating glass in order to produce tablets and other articles." *Provisional protection only.*
ALLEYNE. 1st July 1867.	**1915.** JOHN GAY NEWTON ALLEYNE, of the Butterley Iron Works, Alfreton, in the County of Derby, for an invention for—"Improvements in clocks." *Letters Patent sealed.*
CHAUDRON. 1st July 1867.	**1916.** JOSEPH CHAUDRON, of Brussels, in the Kingdom of Belgium, Civil Engineer, for an invention for—"Improvements in boring or sinking wells and in apparatus and tools employed for that purpose." *Letters Patent sealed.*
HUBERT. TRUSCOTT. 1st July 1867.	**1917.** FRANÇOIS THIERRY HUBERT, of No. 190, East Street, Walworth, Surrey, and HENRY DAVID GREEN TRUSCOTT, of No. 136, East Street, Walworth, Surrey, for an invention for—"Improvements in the construction of general electric telegraphic machines and the mode of working them." *Letters Patent sealed.*
POLLARD. 1st July 1867.	**1918.** FREDERIC TOWNS POLLARD, of Holbeck, near Leeds, in the County of York, for an invention for—"An improved 'bench dog' or bench hook." *Letters Patent sealed.*
IRONSIDE. 1st July 1867.	**1919.** PETER IRONSIDE, of Westminster, in the County of Surrey, Coach Body Maker, for an invention for—"Improvements in the construction of Venetian blinds or shutters." *Letters Patent sealed.*
BURN. 2nd July 1867.	**1920.** JAMES ROBERT BURN, of No. 37, Kirby Street, Hatton Garden, in the County of Middlesex, for an invention for—"Improvements in presses for cutting paper." *Provisional protection only.*
DUCE. 2nd July 1867.	**1921.** WILLIAM DUCE, of York, in the County of York, for an invention for—"Improvements in stoppering bottles and in the apparatus to be employed therein." *Letters Patent sealed.*
STEVEN. ROBERTSON. 2nd July 1867.	**1922.** WILLIAM STEVEN, and ANSELM ROBERTSON, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in brick-making machines." *Provisional protection only.*
GREENHALGH. 2nd July 1867.	**1923.** JOHN GREENHALGH, of Oldham, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery or apparatus for opening and cleaning cotton or other fibrous materials." *Provisional protection only.*

FOWKE. 2nd July 1867.

1924. GEORGE AUGUSTUS FREDERICK FOWKE, of the Conservative Club, St. James Street, Westminster, in the County of Middlesex, Gentleman, for an invention for—"Improvements in compositions for preventing the fouling of the bottoms of ships, floating docks and other similar structures, and in the mode or means of applying the said compositions." *Letters Patent sealed.*

WOOD. WOOD. 2nd July 1867.

1925. THOMAS WOOD, and JOHN WOOD, of Newton Heath, near Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in machinery or apparatus for printing hanks of yarns or threads with one or more colors." *Letters Patent sealed.*

CLARK. 2nd July 1867.

1926. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in breech-loading ordnance."—*A communication to him from abroad by William Armstrong, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

STURGEON. 2nd July 1867.

1927. JOHN STURGEON, of Bolton-le-Moors, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith." *Letters Patent sealed.*

SCHWARTZ. 2nd July 1867.

1928. ADOLPH SCHWARTZ, of Berlin, No. 87, Zimmer Street, in the Kingdom of Prussia, for an invention for—"Improvements in lubricators for lubricating rotating shafts and other moving surfaces." *Provisional protection only.*

YOUNG. 2nd July 1867.

1929. THOMAS YOUNG, of Philadelphia, United States of America, now residing at Enfield, in the County of Middlesex, for an invention for—"Improvements in buttons or fastenings for dress." *Provisional protection only.*

GORDON. 2nd July 1867.

1930. GEORGE GORDON, of San Francisco, California, in the United States of America, at present residing at Morley's Hotel, Charing Cross, in the County of Middlesex, for an invention for—"Improved means of and apparatus for washing and drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and for economizing the waste heat produced in such processes." *Letters Patent sealed.*

SOMERVILLE. ELSDON. 3rd July 1867.

1931. JOHN SOMERVILLE, of the Gas Works, Maidstone, and ROBERT ELSDON, Engineer, of Maidstone, in the County of Kent, for an invention for—"Improvements in the treatment of apparatus employed in the manufacture and materials used in the purification of gas." *Letters Patent sealed.*

ELCE. WILLIAMS. 3rd July 1867.

1932. JOHN ELCE, of the City of Manchester, Machine Maker, and PETER WILLIAMS, of the same place, Machinist, for an invention for—"Improvements in machinery for spinning and doubling." *Letters Patent sealed.*

LAKE. 3rd July 1867.

1933. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in machinery for manufacturing cordage, webbing and other like articles."—*A communication to him from abroad by Jesse Fewkes, of Newton, Massachusetts, United States of America.* *Complete specification; Letters Patent sealed.*

AIKMAN. 3rd July 1867.

1934. FREDERICK ROBERTSON AIKMAN, Lieutenant-Colonel Commanding 2nd City of London Rifle Volunteer Corps, for an invention for—"Improvements in fire-arms and ordnance for the purpose of instructing soldiers, volunteers and others, with a short range only, to fire with precision over long ranges, and for obtaining a correct register of such shooting by showing the result of each shot." *Letters Patent sealed.*

MCKIBBIN. 3rd July 1867.

1935. JOHN MCKIBBIN, of Mount Pottinger, in the County of Down, in Ireland, Gentleman, for an invention for—"Improvements in appliances for filling into and drawing liquids from casks and other vessels, and for excluding the air from such vessels when empty." *Letters Patent sealed.*

DAVEY. DAVY. 3rd July 1867.

1936. HENRY DAVEY, and DAVID DAVY, both of Sheffield, in the County of York, Engineers, for an invention for—"Improvements in centrifugal governors and means of governing steam and other engines." *Letters Patent sealed*

GALLOWAY. PLANT. 3rd July 1867.

1937. WILLIAM GALLOWAY, and GEORGE PLANT, both of Manchester, in the County of Lancaster, for an invention for—"Improvements in the manufacture of welded tubes and in apparatus employed for that purpose, which latter are partly applicable to other purposes." *Letters Patent sealed.*

MORISON. 3rd July 1867.

1938. DAVID PEMBERTON MORISON, of Pelton Colliery, Chester-le-Street, in the County of Durham, Mining Engineer, for an invention for—"Improvements in miners' safety lamps." *Letters Patent sealed.*

BORLASE. 3rd July 1867.

1939. THOMAS BORLASE, of the Parish of Redruth, in the County of Cornwall, Mine Carpenter, &c., for an invention for—"An improved reducing machine for grinding and pulverising metallic ores and any other substances." *Letters Patent sealed.*

SCOTT. STEEL. 3rd July 1867.

1940. WALTER SAMUEL SCOTT, of 11, Lacey Terrace, Kennington, and WILLIAM HENRY STEEL, of 159, Park Road, Clapham, both in the County of Surrey, for an invention for—"Improvements in self-acting escape or relief valves applied to the cylinders of steam-engines." *Letters Patent sealed.*

SHAW. 3rd July 1867.

1941. ROBERT SHAW, of Barrow-in-Furness, in the county of Lancaster, Blacksmith, for an invention for—"Improvements in motive-power engines." *Provisional protection only.*

JOHNSON. 3rd July 1867.

1942. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the mode of preserving butter and substances of a similar nature, and in the apparatus or means employed therein."—*A communication to him from abroad by Adolphe Huillard, of Paris, in the Empire of France.* *Provisional protection only.*

CLARKE. 3rd July 1867.

1943. HENRY CLARKE, of 53, Chancery Lane, in the County of Middlesex, and of Grange Hill, Jamaica, Clerk, for an invention for—"Improvements in propelling vessels." *Letters Patent sealed.*

DAVY. 3rd July 1867.

1944. DAVID DAVY, of Sheffield, in the County of York, Engineer, for an invention for—"Improvements in steam and other hammers whereby to effect economy in the use of the steam or other fluid actuating said hammers." *Letters Patent sealed.*

THOMPSON. 3rd July 1867.

1945. WILLIAM THOMPSON, of No. 85, Lower Gardiner Street, in the City of Dublin, and of Clare Hall, in the County of Dublin, Ireland, for an invention for—"Improvements in mouthpieces for cigars and pipes." *Letters Patent sealed.*

SALMON. HICK. 3rd July 1867.

1946. JAMES SALMON, of Manchester, in the County of Lancaster, Engineer, and GEORGE WILLIAM HICK, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in machines for ruling paper, part of which improvements is also applicable to guiding paper into printing and other machines." *Provisional protection only.*

LEONARDT. 3rd July 1867.

1947. FRIEDRICH LEONARDT, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new or improved combined lamp and match box."—*A communication to him from abroad by Ludwig Böhler, of No. 66, Rue de Bondy, Paris.* *Provisional protection only.*

MCADAMS. 3rd July 1867.

1948. JOHN MCADAMS, of Brooklyn, in the State of New York, United States of America, for an invention for—"Improvements in machinery for printing from a chain of types." *Letters Patent sealed.*

NEWTON. 3rd July 1867.

1949. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for the manufacture of soda water and other aërated liquids."—*A communication to him from abroad by John Matthews, junior, of the City and State of New York, United States of America.* *Letters Patent sealed.*

HERRMANN. 3rd July 1867.

1950. ADOLPHUS EDWARD HERRMANN, of Mincing Lane, in the City of London, Wine Merchant, for an invention for—"An improved lubricating compound."—*A communication to him from abroad by Heinrich Waltjen, of Bremen.* *Provisional protection only.*

BROWN. 3rd July 1867.

1951. ELIZABETH MARTHA BROWN, of Bury St. Edmund's, in the County of Suffolk, for an invention for—"Improvements in apparatus for carrying umbrellas." *Letters Patent sealed.*

HELLARD. 4th July 1867.

1952. ROBERT HELLARD, Reaping Machine Manufacturer, of North Street, Taunton, in the County of Somerset, for an invention for—"Improvements in reaping and mowing machines." *Provisional protection only.*

WELTON. 4th July 1867.

1953. THOMAS WELTON, of 13, Grafton Street, Fitzroy Square, in the County of Middlesex, Maker of Artificial Limbs, for an invention for—"A new revolving shutter or blind to be applied either inside or outside of houses or other buildings." *Provisional protection only.*

VERREYT. 4th July 1867.

1954. JACQUES VERREYT, of Ixelles, near Brussels, in the Kingdom of Belgium, for an invention for—"Improvements in organs with two, three or four key-boards and separate pedal action." *Letters Patent sealed.*

VICARS. VICARS. SMITH. 4th July 1867.

1955. THOMAS VICARS the elder, and THOMAS VICARS the younger, both of Liverpool, in the County of Lancaster, Engineers, and JAMES SMITH, of the same place, Baker, for an invention for—"Improvements in self-feeding smokeless furnaces." *Letters Patent sealed.*

TRANCHAT. 4th July 1867.

1956. PAUL FRANÇOIS TRANCHAT, of No. 6, Passage des Jardins, Paris, in the Empire of France, Engineer, for an invention for—"Improvements in machines for manufacturing circular cutters and milling tools." *Letters Patent sealed.*

CHAMPION. 3th July 1867.

1957. ARTHUR ANTHONY CHAMPION, of the firm of Charles Gärtner, Chronometer and Watch Manufacturer, of Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in chronographs or apparatus combined with chronometers and other time-keepers, for measuring and indicating short intervals of time." *Provisional protection only.*

CLARKE. 4th July 1867.

1958. HENRY CLARKE, of 53, Chancery Lane, in the County of Middlesex, and of Grange Hill, Jamaica, Clerk, for an invention for—"Improvements in apparatus for propelling vessels." *Letters Patent sealed.*

BRADY. 4th July 1867.

1959. FRANCIS BRADY, of 6, St. John's Terrace, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for working railway switches and signals." *Letters Patent sealed.*

BOLTON. 4th July 1867.

1960. JOHN BOLTON, Rector of Swyre, in the County of Dorset, for an invention for—"Improvements in stands or holders for croquet balls and implements." *Letters Patent sealed.*

DAY. 4th July 1867.

1961. WILLIAM DAY, of Westwood Park, Forest Hill, in the County of Surrey, Gentleman, for an invention for—"Improvements in the mode of applying metal sheathing to iron ships, caissons and floating docks, and other iron constructions subject to corrosion." *Letters Patent sealed.*

NEWTON. 4th July 1867.

1962. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Edwin Forbes Gunn, of Charleston, in the State of South Carolina, United States of America.* *Letters Patent sealed.*

NEWTON. 4th July 1867.

1963. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved combined ship's propeller and steerer."—*A communication to him from abroad by Frank G. Fowler, of Springfield, State of Illinois, United States of America.* *Letters Patent sealed.*

PICK. 4th July 1867.

1964. IGNAC PICK, of Falcon Square, in the City of London, Manufacturer, for an invention for—"Improvements in scarfs and other like articles of wearing apparel." *Provisional protection only.*

HENRY. 4th July 1867.

1965. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for raising and lowering heavy bodies."—*A communication to him from abroad by Louis Vernay and Paul Lesourd, both of 33, Boulevart Saint Martin, Paris, France.* *Provisional protection only.*

RUDDICK. 4th July 1867.

1966. HAMILTON RUDDICK, of Chelsea, in the County of Suffolk and State of Massachusetts, one of the United States of America, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

LAKE.
4th July 1867.

1967. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the manufacture of illuminating gas and in apparatus employed in the said manufacture."—*A communication to him from abroad by George A. McIlhenny, of Washington, District of Columbia, United States of America.* *Complete specification; Letters Patent sealed.*

GREENING.
ATKINSON.
5th July 1867.

1968. EDWARD OWEN GREENING, and JOSEPH ATKINSON, of the City of Manchester, Manufacturers, for an invention for—"Improvements applicable to washing, wringing and mangling machines."
Letters Patent sealed; specification filed by order.

ROUSSEL.
5th July 1867.

1969. PIERRE LOUIS FRANÇOIS EUSTACHE ROUSSEL, of Boulogne-sur-Mer, Pas de Calais, in the Empire of France, for an invention for—"A finger stall intended for writing with a single finger." *Provisional protection only.*

ABEL.
5th July 1867.

1970. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"An improved elastic strap for garments."—*A communication to him from abroad by Phineas Taylor Barnum, of the City and State of New York, United States of America.*
Provisional protection only.

MACNAUGHTON.
5th July 1867.

1971. JAMES MACNAUGHTON, of the City and County of Edinburgh, North Britain, Gun Maker, for an invention for—"Improvements in breech-loading fire-arms and in cartridges and projectiles, a part of which improvements is also applicable for converting muzzle-loading fire-arms into breech-loading fire-arms."
Letters Patent sealed.

CARVER.
5th July 1867.

1972. HENRY CLIFTON CARVER, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in hoop iron fastenings for bales."—*A communication to him from abroad by Edmund Drinkwater Carver and George Ashcroft, both of Alexandria, Egypt.* *Letters Patent sealed.*

LAKE.
5th July 1867.

1973. WILLIAM ROBERT LAKE, of the International Patent Office, No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in machinery for manufacturing metal tubes."—*A communication to him from abroad by Charles Granville Smith, of Chelsea, Massachusetts, United States of America.* *Letters Patent sealed.*

CHURCH.
6th July 1867.

1974. WALTER CHARLES CHURCH, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in or applicable to steam and other motive engines." *Letters Patent sealed.*

ANDREW.
CLARKSON.
6th July 1867.

1975. FREDERICK ANDREW, and LEONARD CLARKSON, Harpurhey, near Manchester, in the County of Lancaster, for an invention for—"Improvements in machinery used for printing woven fabrics, warps, yarns and paper."
Provisional protection only.

GORST.
6th July 1867.

1976. WILLIAM RICHARDSON GORST, of Liverpool, in the County of Lancaster, Coach Builder, for an invention for—"Improvements in the construction of wheeled vehicles." *Letters Patent sealed.*

TIERNAN.
6th July 1867.

1977. ROBERT TIERNAN, of Liverpool, in the County of Lancaster, for an invention for—"An improved tobacco pipe." *Provisional protection only.*

THOMAS.
6th July 1867.

1978. THOMAS CALESS THOMAS, of Banbury, in the County of Oxford, Cutler and Gas and Water Fitter, for an invention for—"Improvements in watercloset fittings." *Provisional protection only.*

NEWTON.
6th July 1867.

1979. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"A novel system of constructing railways and working trains thereon, in order to enable trains to ascend inclines of steep gradient."—*A communication to him from abroad by Albert Zélislas Lutowski, of Boulevard Beaumarchais, Paris, in the Empire of France.*
Provisional protection only.

MORGAN.
6th July 1867.

1980. THOMAS MORGAN, of Stockton-on-Tees, in the County of Durham, for an invention for—"Improvements in the construction of apparatus and furnaces for puddling iron." *Provisional protection only.*

WOODCOCK.
6th July 1867.

1981. HENRY BROOK WOODCOCK, of Low Moor, in the County of York, Forge Manager, for an invention for—"An improvement in the manufacture of tyres for railway wheels." *Provisional protection only.*

CRADDOCK. 6th July 1867.

1982. THOMAS CRADDOCK, of 49, Elgin Terrace, Kilburn, in the County of Middlesex, Engineer, for an invention for—"New (or improved) means and machinery or apparatus for enabling persons to fly in the air." *Provisional protection only.*

HARRIS. 6th July 1867.

1983. WILLIAM HARRIS, of the Clydach Iron Works, in the County of Brecon, Mining Engineer, for an invention for—"A process of uniting or cementing and compressing sawdust, shavings and other small particles of wood, for the purpose of converting the same into charcoal, and utilizing the naphtha, tar and other residuary products of such conversion." *Provisional protection only.*

ARCHER. 6th July 1867.

1984. WILLIAM ARCHER, of Birmingham, in the County of Warwick, Coach Builder, for an invention for—"Improvements in rotary engines and rotary pumps." *Provisional protection only.*

TOFT. 6th July 1867.

1985. CHARLES TOFT, of Handsworth, in the County of Stafford, Modeller, for an invention for—"Improvements in liquor frames and other frames for holding bottles and vessels." *Provisional protection only.*

MAJOR. 6th July 1867.

1986. JOHN CLARKSON MAJOR, of Wolverhampton, in the County of Stafford, Manufacturing Chemist, for an invention for—"Improvements in furnaces for the production of heat by burning tar, petroleum and other liquid combustibles, and in the mode of conducting the burning of the said combustibles." *Letters Patent sealed.*

THOMPSON. 6th July 1867.

1987. NATHAN THOMPSON, of 15, Abbey Gardens, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in unions or apparatus for connecting together pipes or tubes, and for stopping the ends thereof." *Provisional protection only.*

SEVERN. 6th July 1867.

1988. GEORGE SEVERN, of Hampstead Road, in the County of Middlesex, for an invention for—"Improvements in refrigerators or apparatus for cooling worts and other liquids." *Provisional protection only.*

WHITFORD. 8th July 1867.

1989. JOHN WHITFORD, of Liverpool, in the County of Lancaster, Ice Merchant, for an invention for—"An improved ice-making apparatus." *Provisional protection only.*

CAPPER. 8th July 1867.

1990. JASPER CAPPER, of Waterloo, near Liverpool, in the County of Lancaster, Accountant, for an invention for—"Improvements in the construction of chimney tops." *Provisional protection only.*

TONGUE. 8th July 1867.

1991. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the mode of training hop and grape vines and other climbing plants."—*A communication to him from abroad by Levi Hubbard Whitney, of Vallejo, Solano County, State of California, United States of America.* *Provisional protection only.*

MCGEORGE. PAUL. 8th July 1867.

1992. IVIE MACKIE MCGEORGE, of Commune, Newry, Ireland, and ALFRED PAUL, of 33, Clevedon Street, Liverpool, for an invention for—"A new or improved plug valve." *Letters Patent sealed.*

JOHNSON. SHINN. RAGG. 8th July 1867.

1993. JOHN JOHNSON, of Manchester, in the County of Lancaster, and EDWARD SHINN, of the same place, and GRINDLE RAGG, of Liverpool, also in the County of Lancaster, for an invention for—"Improvements in signalling apparatus for general purposes, but which is more particularly applicable for use on board navigable vessels." *Letters Patent sealed.*

LOEWE. 8th July 1867.

1994. JULIUS MARIA LOEWE, of 15, Devonshire Terrace, Notting Hill, in the County of Middlesex, for an invention for—"Improvements in the preparation of canvas and other similar materials for enlarging, printing and developing objects from negatives or positives obtained by means of photography." *Provisional protection only.*

SHANKS. 8th July 1867.

1995. JAMES SHANKS, of Arbroath, in the County of Forfar, North Britain, for an invention for—"Improvements in lawn mowing-machines." *Provisional protection only.*

TASKER. 8th July 1867.

1996. WILLIAM TASKER the younger, of the Waterloo Iron Works, near Andover, in the County of Hants, for an invention for—"Improvements in thrashing-machines." *Provisional protection only.*

MATHER.
8th July 1867.

1997. ALEXANDER MATHER, of Edinburgh, in the Kingdom of Scotland, Millwright, for an invention for—"Improved machinery for cleaning grain."
Letters Patent sealed.

TURNER.
HEMSLEY.
8th July 1867.

1998. ARCHIBALD TURNER, of Leicester, Elastic Fabric Manufacturer, and WILLIAM HEMSLEY, of Melbourne, in the County of Derby, Silk Manufacturer, for an invention for—"An improved manufacture of elastic woven fabric applicable to the manufacture of gloves, drawers, under-shirts, and other elastic articles usually made from looped or knitted fabrics." *Provisional protection only.*

CLAYTON.
SHUTTLEWORTH.
8th July 1867.

1999. NATHANIEL CLAYTON, and JOSEPH SHUTTLEWORTH, of Lincoln, in the County of Lincoln, for an invention for—"Improvements in traction engines or road locomotives." *Provisional protection only.*

BOULTON.
8th July 1867.

2000. MATTHEW PIERS WATT BOULTON, of Tew Park, Oxfordshire, Esquire, for an invention for—"Improvements in engines worked by the combustion of inflammable aëriform fluids and in apparatus for producing such fluids."
Letters Patent sealed.

CLAYTON.
SHUTTLEWORTH.
8th July 1867.

2001. NATHANIEL CLAYTON, and JOSEPH SHUTTLEWORTH, of Lincoln, in the County of Lincoln, for an invention for—"Improvements in slide valves suitable for steam-engines." *Letters Patent sealed.*

ANDREWS.
8th July 1867.

2002. WILLIAM ANDREWS, of Union Iron Works, Melksham, in the County of Wilts, for an invention for—"Improvements in hay-making machines."
Letters Patent sealed.

GRAY.
9th July 1867.

2003. JOHN MCFARLANE GRAY, Engineer for Geo. Forrester and Co., of Vauxhall Foundry, Liverpool, in the County of Lancaster, for an invention for—"Improvements in marine steam-engines." *Provisional protection only.*

BUCKLEY.
HOOK.
9th July 1867.

2004. JOHN JAMES BUCKLEY, of No. 1, Bond Street, in the Parish of Saint Luke, Chelsea, and CHARLES HOOK, of Trinity Grove, Maidenstone Hill, Greenwich, in the County of Kent, for an invention for—"Improvements in the manufacture of gas and in apparatus connected therewith." *Letters Patent sealed.*

GEDGE.
9th July 1867.

2005. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"A regulating level."—*A communication to him from abroad by André Durand, of 39, Faubourg St. Martin, Paris, France.* *Provisional protection only.*

GABILLON.
9th July 1867.

2006. GUSTAVE GABILLON, of No. 7, Rue Joquelet, Paris, in the Empire of France, Chemist, for an invention for—"A process to prepare and preserve paper and tissues with a solution of perchloride of iron, intended for stopping the bleeding of wounds." *Letters Patent sealed.*

AVERY.
9th July 1867.

2007. WILLIAM AVERY, of the firm of William Avery and Son, of Redditch, in the County of Worcester, Needle Manufacturers, for an invention for—"Improvements in boxes or cases for holding packets of needles and for other like uses."
Letters Patent sealed.

SHANKS.
9th July 1867.

2008. ANDREW SHANKS, Engineer, 6, Robert Street, Adelphi, Westminster, for an invention for—"Certain improvements in machinery for making rivets."
Provisional protection NOT *granted.*

CREDLAND.
9th July 1867.

2009. JAMES CREDLAND, of the City of Manchester, in the County of Lancaster, Builder, for an invention for—"Improvements in the arrangement of the flues of certain boilers for generating steam." *Provisional protection only.*

CROOK.
CROOK.
9th July 1867.

2010. EDWIN CROOK, and FREDERICK CROOK, both of Carnaby Street, in the County of Middlesex, Manufacturing Ironmongers and Brassfounders, for an invention for—"A new or improved machine for crushing bones and other materials."
Provisional protection only.

NEWTON.
9th July 1867.

2011. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the processes of and apparatus for the rectification and purification of alcohol."—*A communication to him from abroad by Jean Gustave Béquet and Hugues Champonnois, both of Rue St. Sebastien, Paris, in the Empire of France.*
Letters Patent sealed.

SMITH.
9th July 1867.

2012. ROBERT SMITH, of No. 10, Northampton Terrace, Compton Road, Islington, in the Borough of Finsbury, Shipowner, for an invention for—"A new or improved composition for coating ships and other vessels and submerged structures."
Provisional protection only.

LAKE.
9th July 1867.

2013. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in machinery for manufacturing cards for combing or carding fibrous materials."—*A communication to him from abroad by Augustus Bisco Prouty, of Worcester, Massachusetts, United States of America.*
Letters Patent sealed.

WOOD.
9th July 1867.

2014. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the manufacture of Turkey, Wilton, Brussels, tapestry and other terry and cut-pile carpets and rugs."
Provisional protection only.

ANDREWS.
9th July 1867.

2015. WILLIAM STRATFORD ANDREWS, of Hampstead Villa, Abbey Road, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in means or apparatus used in effecting telegraphic communications."
Letters Patent sealed.

ANDREWS.
9th July 1867.

2016. WILLIAM STRATFORD ANDREWS, of Hampstead Villa, Abbey Road, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in means or apparatus used in effecting telegraphic communications."
Letters Patent sealed.

ENGLISH.
FARNDON.
9th July 1867.

2017. HENRY ENGLISH, and JOHN FARNDON, both of the Town and County of Leicester, Machinists, for an invention for—"Improvements in apparatus for operating the shuttles of looms for weaving narrow fabrics." *Provisional protection only.*

WHITING.
10th July 1867.

2018. JAMES EDWARD WHITING, of Victoria Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in suspension bridges and other structures in which girders are employed." *Letters Patent sealed.*

HOOD.
10th July 1867.

2019. JAMES SAMUEL HOOD, of Vivian Road, near Victoria Park, in the County of Middlesex, for an invention for—"Improvements in life buoys."
Letters Patent sealed.

COLLINGE.
COLLINGE.
10th July 1867.

2020. DANIEL COLLINGE, and JOHN COLLINGE, of Oldham, in the County of Lancaster, for an invention for—"Improvements in looms for weaving sponge cloths by power." *Letters Patent sealed.*

FOX.
HALL.
10th July 1867.

2021. HOWARD BUSBY FOX, of Oxton, in the County of Chester, Gentleman, and JAMES TURNER HALL, of Liverpool, in the County of Lancaster, Gas Engineer, for an invention for—"An improved stopper for bottles, jars, casks and other vessels." *Letters Patent sealed.*

HOLMES.
10th July 1867.

2022. FREDERICK HOLMES, of Plumstead, in the County of Kent, Engineer, for an invention for—"Improvements in pumps." *Letters Patent sealed.*

PAXMAN.
DAVEY.
10th July 1867.

2023. JAMES NOAH PAXMAN, and HENRY MATTHEWS DAVEY, of the Standard Iron Works, Colchester, in the County of Essex, Engineers, for an invention for—"Improvements in drying wheat and other grain, and pulse and seeds, and in the apparatus employed therein." *Letters Patent sealed.*

DAVIES.
10th July 1867.

2024. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved metallic eye for laces."—*A communication to him from abroad by Louis Christian Hoffmeister, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

HEYES.
BEVAN.
10th July 1867.

2025. WILLIAM HEYES, of Dukinfield, in the County of Chester, and WILLIAM BEVAN, of the same place, for an invention for—"An improved self-acting buckle or coupling to be employed for lifting, hoisting or winding at coal pits or for other similar purposes." *Provisional protection only.*

WISE.
10th July 1867.

2026. WILLIAM LLOYD WISE, of the Office for Patents, Chandos Chambers, Adelphi, in the City of Westminster, for an invention for—"Improvements in the manufacture of crossings for the permanent ways of railways."—*A communication to him from abroad by Monsieur Clerc, of Paris, in the French Empire, Chief Engineer of the Western Railway of France,.* *Provisional protection only.*

NEWTON.
10th July 1867.

2027. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for boring or perforating rocks, metals or other substances."—*A communication to him from abroad by Horric de la Roche Tolay, of Rue St Sebastien, Paris, in the Empire of France.* *Letters Patent sealed.*

AMOTT.
10th July 1867.

2028. GEORGE ROUGHTON BROMAGE AMOTT, of Gloucester, in the County of Gloucester, for an invention for—"Improved machinery for making bricks for building and other purposes, and of coal, peat or other substances to be used as fuel." *Letters Patent sealed.*

BRANDON.
10th July 1867.

2029. ALEXANDER HORACE BRANDON, Civil Engineer, of 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"Improvements in wood-planing machines."—*A communication to him by Baxter Doddridge Whitney, of Winchendon, U.S. of America.* *Provisional protection only.*

BRANDON.
10th July 1867.

2030. ALEXANDER HORACE BRANDON, Civil Engineer, of 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"An improved circular saw machine."—*A communication to him by Baxter Doddridge Whitney, Engineer, of Winchendon, U.S. of America.* *Letters Patent sealed.*

STIRK.
BYCROFT.
11th July 1867.

2031. JOSEPH STIRK, of Burton-on-Trent, in the County of Stafford, Mechanical Engineer, and HORATIO BYCROFT, of Burton-on-Trent, aforesaid, Plumber, for an invention for—"Improvements in refrigerators for cooling worts and other liquids, which improvements are also applicable to condensers used in distillation." *Letters Patent sealed.*

FRASER.
11th July 1867.

2032. JOSEPH BOYES FRASER, of Kenilworth, in the County of Warwick, Gentleman, for an invention for—"New or improved machinery to be employed in the manufacture of watches and chronometers." *Letters Patent sealed.*

HENDERSON.
MACINTOSH.
11th July 1867.

2033. JOHN SHARP HENDERSON, and JOHN MACINTOSH, both of the City of Aberdeen, North Britain, for an invention for—"Improvements in the manufacture of cylindrical metallic cases and in the machinery or apparatus employed therefor." *Letters Patent sealed.*

JOHNSON.
11th July 1867.

2034. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of refined sugar."—*A communication to him from abroad by Edward Peers Eastwick, of Baltimore, Maryland, United States of America.* *Letters Patent sealed.*

JOHNSON.
11th July 1867.

2035. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in boots and shoes."—*A communication to him from abroad by Edward Heaton, of New Haven, Connecticut, United States of America.* *Complete specification; Letters Patent sealed.*

WINSLOW.
11th July 1867.

2036. KENELM JOHN WINSLOW, of Montpelier Row, Twickenham, in the County of Middlesex, Civil Engineer, for an invention for—"An improved method of conveying the rotary motions to axles of steam-engines and all machines and carriages where cranks are used." *Provisional protection only.*

HUNT.
11th July 1867.

2037. BENJAMIN HUNT, of Culford, in the County of Suffolk, Gentleman, for an invention for—"Improvements in the construction of bearings for machinery, agricultural implements and carriages." *Provisional protection only.*

NEWTON.
11th July 1867.

2038. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of the permanent way of railways."—*A communication to him from abroad by Gustave Natorp, of the City of New York, in the United States of America.* *Provisional protection only.*

BURKE.
BURLEIGH.
11th July 1867.

2039. JOHN SMITH BURKE, and BENJAMIN BURLEIGH, both of 4, Queen's Square, Westminster, for an invention for—"Improvements in the construction of sub-aqueous works and foundations." *Provisional protection only.*

HOHENBRUCK.
11th July 1867.

2040. EDWARD HOHENBRUCK, of Vienna, at present residing at No. 7, Park Square West, Regent's Park, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

KENNEDY.
11th July 1867.

2041. ROBERT ALEXANDER KENNEDY, of Alderley Edge, in the County of Chester, Gentleman, for an invention for—"Improvements in doors and windows and fastenings for the same." *Provisional protection only.*

NELSON. 12th July 1867.

2042. JAMES NELSON, of Bonner's Field, Sunderland, in the County of Durham, Engineer, for an invention for—"Improvements in the casting of hollow and other fire-bars." *Provisional protection only.*

PERRIN. 12th July 1867.

2043. JEAN BAPTISTE ELOYNE GRAND PERRIN, of No. 31, Rue d'Enghein, Paris, in the Empire of France, a Mechanic, for an invention for—"An improved smoke-consuming apparatus." *Provisional protection only.*

BERNIER. 12th July 1867.

2044. EUGÉNE HENRI BERNIER, of No. 12, Rue Corbeau, Paris, in the Empire of France, Civil Engineer, for an invention for—"Improvements in safety apparatus for raising and lowering persons and weights in mines, applicable to other purposes." *Complete specification; Letters Patent sealed.*

WILKINS. 12th July 1867.

2045. FREDERICK WILKINS, of No. 20, York Buildings, Adelphi, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof." *Letters Patent sealed.*

HARGREAVES. 12th July 1867.

2046. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in the manufacture of steel and soft iron from cast iron." *Letters Patent sealed.*

HAIGH. 12th July 1867.

2047. WILLIAM BLACKETT HAIGH, of Oldham, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for tenoning wood." *Letters Patent sealed.*

KELLETT. 12th July 1867.

2048. JONATHAN KELLETT, Manager to the firm of Taylor, Brothers and Co., of the Clarence Iron Works, Leeds, in the County of York, for an invention for—"Improvements in or applicable to steam-boiler and other furnaces for the combustion or prevention of smoke and economizing fuel." *Provisional protection only.*

SINCLAIR. 12th July 1867.

2049. GEORGE SINCLAIR, of the Town of Leith, in the County of Edinburgh, North Britain, Boiler Maker, for an invention for—Improvements in steam-boilers and furnaces." *Letters Patent sealed.*

HIGGINBOTHAM. 12th July 1867.

2050. CHARLES TITUS HIGGINBOTHAM, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel." *Provisional protection only.*

JOHNSON. 12th July 1867.

2051. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for cutting or mincing meat, vegetables and other substances."—*A communication to him from abroad by David Lyman, of Middlefield, Connecticut, in the United States of America.* *Letters Patent sealed.*

CLARK. 12th July 1867.

2052. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the construction of life boats and in detaching tackle for boats."—*A communication to him from abroad by Milton Vorse Nobles, David Decker and William James Dounce, all of Elmira, in the County of Chemung and State of New York, United States of America.* *Letters Patent sealed.*

PASFIELD. 12th July 1867.

2053. JOHN PASFIELD, of Sedgley, in the County of Stafford, Colliery Agent, for an invention for—"Improvements in safety or relief valves." *Provisional protection only.*

HENDERSON. 12th July 1867.

2054. DAVID MARR HENDERSON, of Smethwick, in the County of Stafford, Civil Engineer, for an invention for—"Improvements in the framing of lighthouse lanterns and of the optical apparatus of lighthouses." *Letters Patent sealed.*

HERRMANN. 12th July 1867.

2055. ADOLPHUS EDWARD HERRMANN, of Mincing Lane, in the City of London, Wine Merchant, for an invention for—"An improved compound to be used for igniting fires."—*A communication to him from abroad by Heinrich Waltjen, of Bremen.* *Provisional protection only.*

BOUSFIELD. 12th July 1867.

2056. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in the manufacture of corsets."—*A communication to him from abroad by Joseph Beal, Granville Webster, Edward Sawyer and John Hunt, persons resident at Boston, Massachusetts, United States of America.* *Provisional protection only.*

LAING.
12th July 1867.

2057. JAMES LAING, of Deptford Yard, Sunderland, for an invention for—"An improvement in fastening wood to iron, applicable in securing the planking of composite ships to the iron frame, and for other similar purposes."
Letters Patent sealed.

BIGELOW.
12th July 1867.

2058. ERASTUS BRIGHAM BIGELOW, of Boston, United States of America, at present residing at the Gresham Hotel, Dublin, Ireland, for an invention for—"Improvements in power looms." *Letters Patent sealed.*

LAURENT.
13th July 1867.

2059. PIERRE MICHEL ALBERT LAURENT, of St. Nazaire Town, in the Empire of France, late an Officer of the Imperial Marine, for an invention for—"A certain improvement in nautical compasses." *Letters Patent sealed.*

SIMS.
PREST.
13th July 1867.

2060. RUEBEN SIMS, of the Firm of Picksley, Sims and Company, Limited, of Bedford, in the County of Lancaster, Agricultural Implement Manufacturers, and JOHN PREST, of the same place, Accountant, for an invention for—"Certain improvements in agricultural apparatus called 'horse rakes.'"
Provisional protection only.

WALKER.
13th July 1867.

2061. JACOB WALKER, of Wolverhampton, in the County of Stafford, Machinist, for an invention for—"Improvements in the manufacture of clips or spring boxes for railway and other carriages, and in machinery or apparatus to be employed therein." *Letters Patent sealed.*

DRURY.
WESTRUP.
13th July 1867.

2062. WILLIAM DRURY, of Thorne Street, Wandsworth Road, in the County of Surrey, Carver, and CHARLES WESTRUP, of Old Street Road, in the County of Middlesex, Chair Manufacturer, for an invention for—"Improvements in the means of indicating numbers and names on doors of private houses."
Letters Patent sealed.

BERNEY.
13th July 1867.

2063. THOMAS BERNEY, of Bracon Hall, in the County of Norfolk, Clerk, for an invention for—"Improvements in apparatus for bending bars and plates of metal, and in the converting for purposes of this invention of apparatus already in use." *Letters Patent sealed and specification filed by order.*

BELL.
13th July 1867.

2064. HENRY BELL, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in heel tips and toe tips for boots and shoes."
Provisional protection only.

FLETCHER.
13th July 1867.

2065. HENRY FLETCHER, of 39, Old Hall Street, Liverpool, in the County of Lancaster, for an invention for—"Improvements in apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes."
Letters Patent sealed.

DUKE.
13th July 1867.

2066. HENRY DUKE, of Liverpool, in the County of Lancaster, Blacksmith, for an invention for—"Improvements in apparatus for reefing and furling ships' square sails." *Letters Patent sealed.*

HUGHES.
13th July 1867.

2067. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, of 123, Chancery Lane, London, for an invention for—"An hydraulic self-acting vent peg."—*A communication to him from abroad by Henry Clarke, of Rouen, France.*
Letters Patent sealed.

RAMSDEN.
13th July 1867.

2068. JOHN CARTER RAMSDEN, of Bradford, in the County of York, Reed and Heald Maker, for an invention for—"Improvements in reeds and healds used in weaving." *Provisional protection only.*

SCOTT.
13th July 1867.

2069. JOHN SCOTT, of Oxford Street, in the County of Middlesex, for an invention for—"Improvements in fire-escapes, the same being suitable for ascending and descending mines or other deep places, and at other times convertible into a piece of furniture, such as a couch, ottoman, chair, table or other similar article."
Provisional protection only.

TONGUE.
13th July 1867.

2070. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the construction of instruments or apparatus for ruling parallel, angular and curved lines."—*A communication to him from abroad by Thomas Piatti, of Rue Truffaut aux Batignolles, Paris, in the Empire of France.* *Provisional protection only.*

NORTON. 13th July 1867.

2071. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in apparatus for drying grain, seeds, malt, spent hops, brewers' and distillers' grains, hops, wool, rags and other materials." *Letters Patent sealed.*

BAGGS. 15th July 1867.

2072. ISHAM BAGGS, of High Holborn, in the County of Middlesex, Practical Chemist, for an invention for—"Improvements in the construction of washing-basins and other utensils for holding liquids." *Provisional protection only.*

WRIGLEY. 15th July 1867.

2073. THOMAS WRIGLEY, of Todmorden, in the County of Lancaster, Manager, for an invention for—"Certain improvements in 'pulley and chain' gearing to be employed for lifting or traction purposes, for moving fire bars in furnaces, or for driving mechanism." *Complete specification; Letters Patent sealed.*

BOEHM. 15th July 1867.

2074. GUSTAV BOEHM, of Offenbach, Hesse Darmstadt, for an invention for—"The combination of a bottle and compass, and the mode of combining the same." *Provisional protection only.*

NUTTALL. 15th July 1867.

2075. FRANCIS DIXON NUTTALL, of St. Helen's, in the County of Lancaster, Glass Manufacturer, for an invention for—"Improvements in the construction of furnaces employed in the manufacture of glass." *Letters Patent sealed.*

HETHERINGTON. PITFIELD. 15th July 1867.

2076. JOHN MUIR HETHERINGTON, of Manchester, in the County of Lancaster, Machinist, and ROBERT WALKER PITFIELD, of Bolton, in the said County, Machinist, for an invention for—"Improvements in machinery for preparing and spinning or doubling cotton and other fibrous materials." *Letters Patent sealed.*

BRIÈRE. 15th July 1867.

2077. JULIAN BRIÈRE, of Brussels, in the Kingdom of Belgium, Mechanician, for an invention for—"A continuous self-acting condenser, being an improved boiler feeding apparatus." *Provisional protection only.*

IBBOTSON. 15th July 1867.

2078. ALFRED BUCKINGHAM IBBOTSON, of the firm of Ibbotson Brothers and Company, of Sheffield, in the County of York, Steel Manufacturer, for an invention for—"Improvements in the means or mode of ventilating the interior of railway and other carriages, cabins and holds of ships, and other enclosed spaces."—*A communication to him from abroad by Signor Vecchj, of Turin, in the Kingdom of Italy.* *Letters Patent sealed.*

REDWOOD. 15th July 1867.

2079. THEOPHILUS REDWOOD, of 39, Russell Square, in the County of Middlesex, for an invention for—"Improvements in the preservation of meat and animal substances." *Letters Patent sealed.*

SKINNER. 15th July 1867.

2080. JAMES THOMAS SKINNER, of Keele Newcastle, in the County of Stafford, for an invention for—"Improvements in apparatus for facilitating communication between the guard and the passengers in a railway train." *Provisional protection only.*

FLEMING. 15th July 1867.

2081. JAMES FLEMING, of Glasgow, in the County of Lanark, Customs Agent and Bonded Warehousekeeper, for an invention for—"Improvements in apparatus for drawing or raising beer and other malt or spirituous liquors to a higher level than that of the cask or other vessel in which they are kept." *Letters Patent sealed.*

VALLANCE. 16th July 1867.

2082. FREDERICK BEIOLEY VALLANCE, of 5, Hanover Terrace, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in lamps for burning hydrocarbon essential and mineral oils, alcohol, ether, turpentine and other spirits, animal and vegetable oils, and other inflammable liquids."—*A communication to him from abroad by Louis Auguste Chobert, a person resident at Nanterre, Seine, France.* *Letters Patent sealed.*

DUNN. 16th July 1867.

2083. HENRY GRATTAN DUNN, of 30, Durham Terrace, Camden Grove, North Peckham, in the County of Surrey, for an invention for—"A new apparatus and method for the saving of life and property from fire." *Provisional protection only.*

FRASER. 16th July 1867.

2084. JAMES FRASER, of Liverpool, in the County of Lancaster, Stationer, for an invention for—"Improvements in machinery for printing consecutive numbers." *Provisional protection only.*

HAYES. 16th July 1867.

2085. GEORGE WATKIN HAYES, of Two Waters Mills, Hemel Hempstead, in the County of Herts, for an invention for—"Improvements in machinery for making paper." *Letters Patent sealed.*

MANNOCK. 16th July 1867.

2086. JAMES MANNOCK, of Windsor Road, Oldham, for an invention for—"Improvements in scrapers for cleaning boiler tubes." *Letters Patent sealed.*

McAndrew. 16th July 1867.

2087. William McAndrew, of No. 57, King William Street, in the City of London, for an invention for—"Improvements in machinery for ginning cotton."—*A communication to him from abroad by Charles Wilson Boyd, of Sokia, in Asia Minor.* *Letters Patent sealed.*

Pirie. 16th July 1867.

2088. Thomas Pirie, of Nether Kinmundy, in the County of Aberdeen, North Britain, Implement Maker, for an invention for—"Improvements in ploughs." *Letters Patent sealed.*

Bonneville. 16th July 1867.

2089. Henri Adrien Bonneville, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the permanent way of railroads."—*A communication from Achille Philippe Cyprien Legrand, a person resident at Mons, in the Kingdom of Belgium, Manufacturer.* *Complete specification; Letters Patent sealed.*

Bonneville. 16th July 1867.

2090. Henri Adrien Bonneville, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"Improvements in brushes."—*A communication from Henry Rosenthal, a person resident at New York City, in the State of New York, United States of America.* *Provisional protection only.*

Riddell-Webster. 17th July 1867.

2091. Thomas Wyllie Riddell-Webster, residing at Invereighty, in the Parish of Kinnettles, and County of Forfar, Esquire, for an invention for—"An improved method of loading any number, description or size of cartridges used in breech-loading guns, with safety, rapidity and precision, and with any charge variable at pleasure." *Letters Patent sealed.*

Archer. 17th July 1867.

2092. Thomas Archer, junior, of Dunston Engine Works, Gateshead-on-Tyne, in the County of Durham, Engineer, for an invention for—"Improvements in machinery or apparatus for crushing and pulverizing ores, stones and other hard substances." *Letters Patent sealed.*

Tate. 17th July 1867.

2093. Charles Maitland Tate, of 13, Clearmont Square, in the Parish of Clarkenwell, and County of Middlesex, for an invention for—"Improvements in button fastenings for attaching buttons or ornaments to garments." *Provisional protection only.*

Weedon. 17th July 1867.

2094. George Weedon, of King Street, Soho, in the County of Middlesex, for an invention for—"Improvements in knife-cleaning machines." *Letters Patent sealed.*

Schofield. Dawson. 17th July 1867.

2095. James Schofield, of Leeds, in the County of York, Plumber, and Joshua Caleb Dawson, also of Leeds, in the County of York, Publican, for an invention for—"Improved means and apparatus for 'malting' or drying barley, part of which means and apparatus is also applicable to other purposes." *Letters Patent sealed and specification filed by order.*

De Smet. 17th July 1867.

2096. Auguste de Smet, of Ghent, in the Kingdom of Belgium, Administrator of the Société Liniere Gantoise, of that place, for an invention for—"Improvements in means of communicating motion to the spindles of spinning, roving, doubling, twisting, winding and other similar machines." *Letters Patent sealed.*

Slater. 17th July 1867.

2097. John Slater, of Bankfoot, near Hebden Bridge, in the County of York, Fustian Manufacturer, for an invention for—"Improvements in steam generators and condensers." *Provisional protection only.*

Daw. 17th July 1867.

2098. George Henry Daw, of Threadneedle Street, in the City of London, for an invention for—"Improvements in cartridge pouches or carriers."—*A communication to him from abroad by Clarence Blake, a person resident at Boston, United States of America.* *Letters Patent sealed.*

Lister. 17th July 1867.

2099. Samuel Cunliffe Lister, of Manningham Hall, Bradford, Yorkshire, for an invention for—"Consuming smoke, economising fuel and generating steam." *Provisional protection only.*

Johnson. 17th July 1867.

2100. John Henry Johnson, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the treatment and purification of oils."—*A communication to him from abroad by Felix Asselin, of Paris, in the Empire of France.* *Provisional protection only.*

SWANN. 17th July 1867.

2101. JOHN RUSSELL SWANN, of No. 21, Leith Walk, Edinburgh, in the County of Midlothian, in Scotland, Builder, for an invention for—"Improvements in steam-engines." *Provisional protection only.*

KLUG. 17th July 1867.

2102. CHRISTIAN KLUG, of 77, Regent Street, W., London, for an invention for—"An improvement in the preparation of chocolate and cocoa." *Letters Patent sealed; no specification filed.*

LAKE. 17th July 1867.

2103. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in looms for weaving."—*A communication to him from abroad by George Crompton, of Worcester, Massachusetts, United States of America.* *Letters Patent sealed.*

STUBBER. 18th July 1867.

2104. NICHOLAS JOHN OLIVER STUBBER, of No. 10, Claverton Street, Pimlico, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the mode of treating flax, hemp and other fibrous plants for the purposes of spinning." *Provisional protection only.*

BARNINGHAM. THOMPSON. 18th July 1867.

2105. WILLIAM BARNINGHAM, of the Rolling Mills, Pendleton, in the County of Lancaster, Engineer, and JOHN THOMPSON, of the same place, Manager, for an invention for—"Improvements in machinery for bending, straightening and punching rods, bars and other articles of metal." *Letters Patent sealed.*

MORTON. 18th July 1867.

2106. ALEXANDER MORTON, of the City of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in the lateral action or induction of fluids and in the apparatus or mechanism employed therefor." *Letters Patent sealed.*

WALKER. 18th July 1867.

2107. THOMAS DAWSON WALKER, of Longwood, near Huddersfield, in the County of York, Cloth Finisher, for an invention for—"Improved means of heating the feed-water supplied to steam-boilers." *Letters Patent sealed.*

PALMER. PALMER. PALMER. 18th July 1867.

2108. JOHN PALMER, of Harborne, in the County of Stafford, Manufacturer, and JOHN PALMER the younger, of Harborne, aforesaid, Manufacturer, and THOMAS PALMER, of Harborne, aforesaid, Manufacturer, for an invention for—"Improvements in moveable spanners or screw wrenches." *Letters Patent sealed.*

WARDEN. 18th July 1867.

2109. WILLIAM WARDEN, of 15, Ellison Street, Gateshead-on-Tyne, for an invention for—"Improvements in securing the more effectual obliteration of postage and other stamps." *Provisional protection only.*

BOUSFIELD. 18th July 1867.

2110. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in heating and cooking apparatus."—*A communication to him from abroad by Oscar Fitzallan Morrill, a person resident at Chelsea, in the County of Suffolk and State of Massachusetts, United States of America.* *Provisional protection only.*

HARRISON. HARRISON. 18th July 1867.

2111. JOSEPH JOHN HARRISON, and EDWARD HARRISON, both of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

BRADBURY. BOTTOMLEY. 18th July 1867.

2112. RALPH THOMAS BRADBURY, of Saddleworth, in the County of York, Woollen Manufacturer, and THOMAS BOTTOMLEY, of the same place, Carder, for an invention for—"Improvements in carding-engines." *Letters Patent sealed.*

PATON. 18th July 1867.

2113. ADAM PATON, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in letterpress and lithographic printing machinery." *Letters Patent sealed.*

HARGREAVES. 19th July 1867.

2114. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in utilizing certain materials or products obtained during the manufacture of steel and iron." *Letters Patent sealed.*

BUTLER. EDWARDS. 19th July 1867.

2115. JAMES WILLIAM BUTLER, of 19, Savile Row, and EDMUND EDWARDS, of 22, Buckingham Street, Adelphi, both in the County of Middlesex, for an invention for—"Improvements in apparatus for floating in and travelling through the air." *Letters Patent sealed.*

ROGERS. 19th July 1867.

2116. JOHN ROGERS, of 161, King's Cross Road, in the County of Middlesex, for an invention for—"Improvements in fastenings for window-sashes, casements, shutters, doors, port-hole lights and other similar objects."

Provisional protection only.

BOUSFIELD. 19th July 1867.

2117. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in self-lubricating bolsters for spinning machines."—*A communication to him from abroad by Erastus Newton Steere, a person resident at Providence, Rhode Island, United States of America.*

Complete specification; Letters Patent sealed.

METHAM. 19th July 1867.

2118. PREN HENRY METHAM, of Rotherhithe, in the County of Surrey, Ships' Smith, for an invention for—"An improved rudder especially adapted for barges."

Provisional protection only.

SAXBY. 20th July 1867.

2119. JOHN SAXBY, of the firm of Saxby and Farmer, of Kilburn, Railway Signal Engineers, for an invention for—"Improvements in the mechanical contrivances and apparatus employed for locking and for actuating or setting in motion the locking and interlocking gear used or intended to be used for regulating or governing the action and movement of railway points and signals in relation to each other."

Letters Patent sealed.

CORNISH. 20th July 1867.

2120. KENNETH HENRY CORNISH, of 3, Saint Mary Axe, in the City of London, Merchant, for an invention for—"Improvements in entrenching tools to be carried on the stocks of fire-arms."

Provisional protection only.

HARGREAVES. 20th July 1867.

2121. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in the production of compounds of soda from chloride of sodium, and compounds of potassa from chloride of potassium, and in apparatus employed therein."

Provisional protection only.

BROMWICH. 20th July 1867.

2122. THOMAS BROMWICH, of Bridgnorth, in the County of Salop, Draper, for an invention for—"An improved means of allowing the escape of superfluous carbon from casks of newly-made wine, cider, perry and other fermenting liquors."

Provisional protection only.

WHITWORTH. 20th July 1867.

2123. CHARLES FREDERICK WHITWORTH, of Upper Mill, Saddleworth, in the County of York, Engineer, for an invention for—"Improvements in apparatus for preventing accidents at junctions, crossings and sidings of railways."

Letters Patent sealed.

BUDENBERG. 20th July 1867.

2124. ARNOLD BUDENBERG, of the firm of Schäffer and Budenberg, of Manchester, in the County of Lancaster, for an invention for—"Improvements in joints of pipes or tubes."—*A communication to him from abroad by Bernhard August Schäffer and Christian Friedrich Budenberg, of Buckaw, Magdeburg, in the Kingdom of Prussia.*

Letters Patent sealed.

TAYLOR. 20th July 1867.

2125. WILLIAM TAYLOR, of Nursling, in the County of Southampton, Gentleman, for an invention for—"Improvements in pipes for ventilating, heating and vaporizing hothouses, malthouses and other buildings and residences."

Letters Patent sealed.

CREAMER. 20th July 1867.

2126. WILLIAM GAUDLY CREAMER, of Woburn Place, Russell Square, in the County of Middlesex, Engineer, for an invention for—"Improved automatic apparatus for the ventilation of railway carriages, omnibuses and other vehicles, and the cabins of steamboats."

Letters Patent sealed.

SEZILLE. 20th July 1867.

2127. ALEXANDRE SEZILLE, residing at Noyon Town in the French Empire, Merchant, for an invention for—"An improved process of decorticating, crushing and treating dry peas."

Provisional protection only.

SHAW. STIRK. 20th July 1867.

2128. ROBERT SHAW, of Leeds, in the County of York, Engineer, and JOHN STIRK, of the same place, Foreman, for an invention for—"Improvements in brick-making machinery."

Provisional protection only.

POTTS. 20th July 1867.

2129. WILLIAM POTTS, of Handsworth, in the County of Stafford, Manufacturer, for an invention for—"Improvements in apparatus for suspending pictures and other articles."

Letters Patent sealed.

HOOPER. 20th July 1867.

2130. JAMES HOOPER, of Moseley, in the County of Worcester, Plumber and Glazier, for an invention for—"Improvements in ventilators." *Letters Patent sealed.*

FRANZONI. 22nd July 1867.

2131. BARTHOLOMEW PHILIP FRANZONI, of Oxford Street, in the County of Middlesex, for an invention for—"A new or improved method of hardening plaster, plaster castings and the like." *Provisional protection only.*

BREITHAUPT. 22nd July 1867.

2132. THEOPHILE AUGUSTE BREITHAUPT, of No. 15, Passage des Petites Ecuries, Paris, in the Empire of France, Chemist, for an invention for—"Certain processes of manufacturing extract and essence of hop to be substituted for the plant itself in the making of beer." *Letters Patent sealed.*

LEA. 22nd July 1867.

2133. HENRY LEA, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in taps or valves." *Letters Patent sealed.*

LAKE. 22nd July 1867.

2134. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved apparatus for cleaning boiler and other tubes."—*A communication to him from abroad by John Baptiste Christoffel, Samuel Booth and Samuel Booth, junior, all of the City and State of New York, United States of America.* *Complete specification: Letters Patent sealed.*

WALKER. 22nd July 1867.

2135. JOHN WALKER, of Cowper Street, City Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery for washing bottles, casks and other vessels." *Letters Patent sealed.*

SCHLAGINTWEIT-SAKÜNLÜNSKI. 22nd July 1867.

2136. HERMANN VON SCHLAGINTWEIT-SAKÜNLÜNSKI, of Weymouth Street, Portland Place, in the County of Middlesex, Gentleman, for an invention for—"Improvements in transferring devices in lace and other fabrics and fac-similes of textures onto printing surfaces, and in the application of the devices and textures obtained from such surfaces." *Provisional protection only.*

NEWTON. 22nd July 1867.

2137. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in brewing and in apparatus employed therein."—*A communication to him from abroad by William Sylvanus Haight, of Waterford, in the State of New York and United States of America.* *Letters Patent sealed.*

WELSH. 22nd July 1867.

2138. DAVID WELSH, of the City of Glasgow, in the County of Lanark, North Britain, Mechanic, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

TOMLINSON. 23rd July 1867.

2139. EDWARD TOMLINSON, of 85, Hatton Garden, in the County of Middlesex, Printer, for an invention for—"Improvements in means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending and manufacturing articles from wood and other materials." *Provisional protection only.*

JOHNSON. 23rd July 1867.

2140. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of nets and netting."—*A communication to him from abroad by Benjamin Arnold, of East Greenwich, Rhode Island, and William John Hooper, of Woodberry, Cica, County of Baltimore, State of Maryland, both in the United States of America.* *Letters Patent sealed.*

DENNIS. 23rd July 1867.

2141. WILLIAM DENNIS, of Aldermanbury, in the City of London, Merchant, for an invention for —"Improvements in letter boxes, letter pillars and such like depositories." *Provisional protection only.*

DUFRENÉ. 23rd July 1867.

2142. HECTOR AUGUSTE DUFRENÉ, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, and 4, South Street, Finsbury, London, Civil Engineer, for an invention for—"Improvements in preserving iron from oxidation."—*A communication from Monsieur Alfred Delcelier, a person resident at Eu, in the Empire of France.* *Letters Patent sealed.*

EASTERBROOK. 23rd July 1867.

2143. WALTER EASTERBROOK, of 65, Albert Road, Kilburn, in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery or apparatus for actuating, setting in motion, locking, interlocking and controlling railway points and signals." *Letters Patent sealed.*

MARLEY.
23rd July 1867.

2144. JOHN MARLEY, of Darlington, in the County of Durham, Mining Engineer and Member of the Institute of Civil Engineers, for an invention for—"Improved apparatus for the prevention of overwinding and falling of the cages used in mine shafts, lifts and hoists." *Provisional protection only.*

BONSALL.
23rd July 1867.

2145. STERLING BONSALL, of Philadelphia, United States of America, but now residing in Aldersgate Street, in the City of London, for an invention for—"Improvements in spring bed bottoms." *Letters Patent sealed.*

BONSALL.
23rd July 1867.

2146. STERLING BONSALL, of Philadelphia, United States of America, but now residing in Aldersgate Street, in the City of London, for an invention for—"Improvements in tanning and in the machinery and apparatus to be employed therein." *Letters Patent sealed.*

THOMSON.
23rd July 1867.

2147. Sir WILLIAM THOMSON, Knight, of Glasgow College, Doctor of Laws and Professor of Natural Philosophy in the University and College of Glasgow, for an invention for—"Improvements in receiving or recording instruments for electric telegraphs." *Letters Patent sealed.*

GEEVES.
23rd July 1867.

2148. WILLIAM GEEVES, of Thornhill Square, Barnsbury, in the County of Middlesex, for an invention for—"Improvements in machinery for cutting tenons." *Letters Patent sealed.*

LAKIN.
24th July 1867.

2149. ROBERT LAKIN, of Chorlton-upon-Medlock, in the City of Manchester, Machinist, for an invention for—"Improvements in aërial locomotion." *Provisional protection only.*

SIMPSON.
HOWITT.
24th July 1867.

2150. WILLIAM SIMPSON, of Chilton House, Rosherville, in the County of Kent, and WILLIAM HOWITT, of Manchester Buildings, Silchester Road, Notting Hill, in the County of Middlesex, for an invention for—"Improvements in the construction of the roofs of horticultural and other buildings and structures." *Letters Patent sealed.*

BETTS.
24th July 1867.

2151. WILLIAM BETTS, of No. 1, Wharf Road, City Road, in the County of Middlesex, Capsule Manufacturer, for an invention for—"Improvements in the manufacture of capsules."—*A communication to him from abroad by Florentin Aubey, of Bordeaux, in the Empire of France, Manufacturer.* *Letters Patent sealed.*

AITKEN.
24th July 1867.

2152. HENRY AITKEN, of Falkirk, in the County of Stirling, North Britain, for an invention for—"Improvements in the manufacture of coke." *Provisional protection only.*

RODEN.
24th July 1867.

2153. RICHARD BROWN RODEN, of Usk, in the County of Monmouth, Gentleman, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

PRIDEAUX.
24th July 1867.

2154. THOMAS PRIDEAUX, of Prideaux Chambers, Sheffield, for an invention for—"Improvements in open fire-places and stove-grates, for the purpose of economising fuel and securing a more perfect combustion." *Provisional protection only.*

CLARK.
24th July 1867.

2155. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved reciprocating motion."—*A communication to him from abroad by John Berry Page, of New York City, in the United States of America.* *Letters Patent sealed.*

TURTON.
HOLCROFT.
25th July 1867.

2156. SAMUEL TURTON, of Heaton Norris, in the County of Lancaster, Engineer, and GEORGE HOLCROFT, of the City of Manchester, Consulting Engineer, for an invention for—"Improvements in apparatus for facilitating communications between passengers, guards and drivers of railway trains." *Letters Patent sealed.*

HOWES.
BURLEY.
25th July 1867.

2157. WALTER HOWES, and WILLIAM BURLEY, both of Birmingham, in the County of Warwick, Lamp Manufacturers, for an invention for—"An apparatus for securing lamps for railway and other carriages." *Complete specification; Letters Patent sealed.*

MURRAY.
25th July 1867.

2158. CHARLES HENRY MURRAY, of Loman Street, Southwark, in the County of Surrey, Machinist, for an invention for—"Improvements in machinery for moulding clay for making bricks, tiles and other analogous articles from plastic substances." *Letters Patent sealed.*

MOULAN. 25th July 1867.

2159. CELI TIMOLEON MOULAN, of Verviers, in the Kingdom of Belgium, Engineer, for an invention for—"Improvements in the construction of moveable joints for connecting metallic pipes and tubes." *Provisional protection only.*

NEWTON. 25th July 1867.

2160. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of mould boards for ploughs."—*A communication to him from abroad by Leman Philander Rider, of Munson, in the State of Ohio, United States of America.* *Letters Patent sealed.*

WILSON. 25th July 1867.

2161. ALEXANDER WILSON, of the Cyclops Steel and Iron Works, Sheffield, in the County of York, for an invention for—"Improvements in the casting of ingots." *Letters Patent sealed.*

BROWN. LILLIE. 25th July 1867.

2162. JOHN BROWN, of Howburn, in the Parish of Carham and County of Northumberland, and WILLIAM LILLIE, of Tweedmouth, in the same County, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

WOOD. 25th July 1867.

2163. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in producing and treating fibres from rags and in apparatus for the same." *Provisional protection only.*

MACKIE. 25th July 1867.

2164. ALEXANDER MACKIE, of Warrington, in the County of Lancaster, Newspaper Proprietor, for an invention for—"Certain improvements in the method of composing and distributing type, and in apparatus to be employed for such purposes." *Letters Patent sealed.*

ALMOND. 25th July 1867.

2165. THOMAS MICHAEL ALMOND, of Scarborough, in the County of York, Master Mariner, for an invention for—"Improvements in signalling at sea and in apparatus to be employed for such purpose." *Provisional protection only.*

BROOMAN. 25th July 1867.

2166. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the manufacture of cast steel and its derivatives."—*A communication to him from abroad by Emile Martin and Pierre Emile Martin, both of Paris, France.* *Letters Patent sealed.*

BROOMAN. 25th July 1867.

2167. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the manufacture of cartridge cases."—*A communication to him from abroad by Hippolyte Rochatte, of Paris, France.* *Letters Patent sealed.*

BARENS. LADOUGNE. 25th July 1867.

2168. GUILLAUME LAURENT BARENS, and JEAN FRUCTUEUX LADOUGNE, of Rue du Jour, No. 8, Paris, for an invention for—"Improvements in breech-loading fire-arms and in cartridges." *Letters Patent sealed.*

EDGE. 26th July 1867.

2169. JONATHAN EDGE, of the Tipping Iron Works, Bolton-le-Moors, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

SILVY. 26th July 1867.

2170. CAMILLE SILVY, of 38, Porchester Terrace, Bayswater, in the County of Middlesex, for an invention for—"Improvements in photographic apparatus." *Letters Patent sealed.*

REID. CRAIGIE. 26th July 1867.

2171. ROBERT REID, and EDWARD HORNE CRAIGIE, both resident in Kilmarnock, in the County of Ayr, North Britain, for an invention for—"An improved reclining chair." *Letters Patent sealed.*

NORTHCOTE. 26th July 1867.

2172. GEORGE BARONS NORTHCOTE, junior, of Feniton Rectory, Honiton, in the County of Devon, Civil Engineer, for an invention for—"Improvements in apparatus for charging and turning cartridges for breech-loading fire-arms." *Letters Patent sealed.*

SMITH. 26th July 1867.

2173. EDMUND SMITH, of the free Town of Hamburg, Germany, Gas Meter Manufacturer, for an invention for—"Improvements in gas regulators." *Letters Patent sealed.*

SMITH. SCHOFIELD. 27th July 1867.

2174. JOHN SMITH, and WILLIAM SCHOFIELD, both of Baxenden, in the County of Lancaster, Turkey Red Dyers, for an invention for—"Improvements in the construction of elastic rollers for squeezing yarns and fabrics, and for other purposes." *Letters Patent sealed.*

RIPPINGILLE. 27th July 1867.

2175. EDWARD ALEXANDER RIPPINGILLE, of the Albion Lamp Company, Holborn Hill, in the County of Middlesex, for an invention for—"Improvements in the mode of distilling or separating the more volatile portions of petroleum and other mineral oils, and in means or apparatus for ascertaining the igniting and explosive point of such oils." *Letters Patent sealed.*

REID. 27th July 1867.

2176. THOMAS REID, of Monkton Mill, in the County of Ayr, North Britain, Farmer, for an invention for—"Improvements in agricultural implements for digging potatoes, for grubbing, for forming drills and for similar uses." *Provisional protection only.*

GEDGE. 27th July 1867.

2177. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agents, for an invention for—"An improved machine for cutting slate in quarries previous to laying them open, and for cutting in coal pits, mines and stone quarries."—*A communication to him from abroad by Joseph Debry, of 39, Faubourg St. Martin, Paris, in the Empire of France.* *Letters Patent sealed.*

HUGHES. 27th July 1867.

2178. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the mode of constructing and propelling steam-vessels."—*A communication to him from abroad by Stephen Johnson Gold, of Cornwall, Connecticut, and Henry James Weston, of Brooklyn, King's County, New York, United States of America.* *Letters Patent sealed.*

NEWTON. 27th July 1867.

2179. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved water and gas meter."—*A communication to him from abroad by Joshua Mason, of Paterson, in the State of New Jersey, United States of America.* *Letters Patent sealed.*

ROHART. 27th July 1867.

2180. PAUL ALEXANDRE ROHART, of Rue du Canteleux, Douai, in the Department du Nord, in the Empire of France, Gentleman, for an invention for—"Improvements in the manufacture of gases for the production of light, heat and motive-power, and in apparatus for that purpose." *Letters Patent sealed.*

JACK. 27th July 1867.

2181. ALEXANDER JACK, of Maybole, in the County of Ayr, North Britain, for an invention for—"Improvements in machinery or apparatus for digging potatoes, turnips and other roots." *Provisional protection only.*

CHAMBERLAIN. 27th July 1867.

2182. HUMPHREY CHAMBERLAIN, of No. 3, Saint John's, Wakefield, in the County of York, Civil Engineer, for an invention for—"Improvements in hot-blast stoves." *Letters Patent sealed.*

FRANKLIN. 27th July 1867.

2183. GEORGE FRANKLIN, of 18, Cannon Street, in the City of London, for an invention for—"Improvements applicable to ships' compasses." *Provisional protection only.*

JONES. 27th July 1867.

2184. THOMAS JONES, of Birmingham, in the County of Warwick, Locksmith, for an invention for—"Improvements in locks and latches." *Letters Patent sealed.*

WOOD. 27th July 1867.

2185. JOHN WOOD, of Birmingham, in the County of Warwick, Iron Founder, for an invention for—"Improvements in the manufacture and treatment of certain kinds of iron." *Provisional protection only.*

RAVENSCROFT. 27th July 1867.

2186. EDWARD RAVENSCROFT, of Birmingham, in the County of Warwick, Warehouseman, for an invention for—"Improvements in lamps." *Letters Patent sealed.*

MACFIE. 27th July 1867.

2187. ARCHIBALD MACFIE, of Birmingham, in the County of Warwick, Auctioneer, for an invention for—"Improvements in apparatus for supporting lines for drying clothes and for other like purposes." *Provisional protection only.*

LEAVER. SMALLEY. 29th July 1867.

2188. WILLIAM LAWRENCE LOWE LEAVER, Draper, of Blackburn, in the County of Lancaster, and AARON SMALLEY, Draper, of Preston, in the County of Lancaster, for an invention for—"An improved method of lighting house and other fires." *Provisional protection only.*

GREENER. ELLIS. 29th July 1867.

2189. THOMAS GREENER, of Darlington, in the County of Durham, Mining Engineer, and WILLIAM ELLIS, of Darlington aforesaid, for an invention for—"Improvements in the manufacture of iron and in the production of 'fetling' for improving the quality and yield of iron in the process of reduction."
Letters Patent sealed.

CLARK. 29th July 1867.

2190. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in projectiles."—*A communication to him from abroad by Jules Felix Gevelot, Cartridge Manufacturer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

LAKE. 29th July 1867.

2191. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in machinery for hulling rice and other grains."—*A communication to him from abroad by Simon Gardner Cheever, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

DAVIES. 29th July 1867.

2192. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in insulators for telegraphic wires."—*A communication to him from abroad by David Brooks, of Philadelphia, Pennsylvania, in the United States of America.* *Letters Patent sealed.*

WESTMACOTT. 29th July 1867.

2193. PERCY GRAHAM BUCHANAN WESTMACOTT, of Elswick, Newcastle-on-Tyne, for an invention for—"Improvements in cranes and apparatus for raising, hauling and lowering weights." *Letters Patent sealed.*

HODGE. WITTY. 29th July 1867.

2194. DAVID HODGE, of Hatton Garden, and ROBERT CHRISTOPHER WITTY, of Laurel Street, Dalston, both in the County of Middlesex, Engineers, for an invention for—"Improvements in apparatus to be used in making gas from petroleum and other liquids." *Letters Patent sealed.*

WYATT. 29th July 1867.

2195. JOHN HENRY WYATT, of Charing Cross, in the County of Middlesex, Jeweller, for an invention for—"Improvements in the construction of studs, buttons, solitaire studs and the like." *Provisional protection only.*

STEVENS. 29th July 1867.

2196. BENJAMIN FRANKLIN STEVENS, of Henrietta Street, Covent Garden, in the County of Middlesex, Gentleman, for an invention for—"Improvements in burning petroleum and other hydrocarbon liquids for the production of heat and light, and in the apparatus or means employed therein."—*A communication to him from abroad by Simon Stevens, of the City and State of New York, in the United States of America.* *Letters Patent sealed.*

HOLLOWAY. 30th July 1867.

2197. ABEL HOLLOWAY, of No. 96, Grange Road, Birmingham, in the County of Warwick, Fancy Lock, Clasp and Button Manufacturer, for an invention for—"A new or improved elastic clasp or lock suitable for pocket-books, purses, wallets or any kind of leather cases." *Provisional protection only.*

WATT. 30th July 1867.

2198. ALEXANDER WATT, of Putney, in the County of Surry, Consulting Chymist, for an invention for—"An improved fertilizing compost."
Letters Patent sealed.

MENAGE. 30th July 1867.

2199. JEAN BAPTISTE AUGUSTE MENAGE, of 21, Guildford Street East, Farringdon Road, in the County of Middlesex, French Lamp Maker, for an invention for—"Improvements in the construction of the lamp commonly called the moderator lamp." *Letters Patent sealed.*

JONES. 30th July 1867.

2200. JOSEPH JONES, of Little Bolton, in the County of Lancaster, for an invention for—"An improved chemical mixture or compound for extinguishing fires and destroying explosive fire-damp in coal mines." *Letters Patent sealed.*

GADD. MOORE. 30th July 1867.

2201. WILLIAM GADD, of 122, Portland Road, Nottingham, Consulting Engineer, and JOHN MOORE, of Manchester, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HAWORTH. HAMER. 30th July 1867.

2202. JAMES HAWORTH, of Denton, in the County of Lancaster, Machinist, and EDWIN HAMER, of Manchester, Mechanic, for an invention for—An improvement in rollers used in machinery for doubling cotton and other fibrous material."
Provisional protection only.

BROWN.
BULL.
30th July 1867.

2203. JOHN HARCOURT BROWN, of Richmond, in the County of Surrey, Gentleman, and WILLIAM BULL, of Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of hats, caps, bonnets and other coverings for the head, and the foundations thereof or similar articles, and in the means and appliances for producing the same."
Provisional protection NOT *granted.*

MURRAY.
30th July 1867.

2204. ANDREW MURRAY, of Her Majesty's Dockyard, Portsmouth, for an invention for—"Improvements in apparatus for hauling vessels or other heavy bodies into deep water." *Letters Patent sealed.*

MAYO.
30th July 1867.

2205. CHARLES MAYO, of New College, Oxford, for an invention for—"Improvements in propelling and steering vessels." *Letters Patent sealed.*

JAMES.
30th July 1867.

2206. ARTHUR JAMES, of Redditch, in the County of Worcester, Needle Manufacturer, for an invention for—"Improvements in needle cases and wrappers."
Letters Patent sealed.

MARTIN.
VARLEY.
30th July 1867.

2207. SAMUEL MANLEY MARTIN, of Pinner, in the County of Middlesex, and SAMUEL ALFRED VARLEY, of 66, Roman Road, Holloway, in the said County of Middlesex, Telegraph Engineers, for an invention for—"Improvements in signalling upon railway trains, parts of which apparatus are applicable to electric telegraphs generally." *Letters Patent sealed.*

DOBSON.
COCKER.
31st July 1867.

2208. BENJAMIN DOBSON, of the firm of Messieurs Dobson and Barlow, of Bolton, in the County of Lancaster, Machine Makers, and JAMES COCKER, of Chadderton, near Oldham, in the same County, Overlooker, for an invention for—"Improvements in machines for spinning and doubling." *Letters Patent sealed.*

DOBSON.
SLATER.
31st July 1867.

2209. BENJAMIN DOBSON, of the firm of Messieurs Dobson and Barlow, of Bolton, in the County of Lancaster, Machine Makers, and WILLIAM SLATER, of the same place, Manager, for an invention for—"Certain improvements in carding-engines." *Letters Patent sealed.*

PUDDEFOOT.
31st July 1867.

2210. MICHAEL PUDDEFOOT, of Greenwich, in the County of Kent, for an invention for—"An improved plough." *Provisional protection only.*

FEARNLEY.
SMITH.
31st July 1867.

2211. MARY JANE FEARNLEY, Widow and Executrix of the late Samuel Fearnley, of Macclesfield, in the County of Chester, and CHARLES SMITH, of Great Horton, near Bradford, in the County of York, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HOCKING.
31st July 1867.

2212. JOSEPH MATTHEWS HOCKING, of Marshal Keate, Poplar, in the County of Middlesex, for an invention for—"Improvements in the means and apparatus for condensing noxious smoke and vapours." *Letters Patent sealed.*

GORDON.
31st July 1867.

2213. GEORGE GORDON, of San Francisco, California, in the United States of America, at present residing at Liverpool, in the County of Lancaster, for an invention for—"Improved processes and apparatus to be used in the manufacture of sugar, and in sawing, cutting or forming the same into cubes for use."
Letters Patent sealed.

LAKE.
31st July 1867.

2214. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved machine for manufacturing weavers' harness."—*A communication to him from abroad by Joseph Sprague Winsor and William Walton Fletcher, both of Providence, Rhode Island, United States of America.*
Complete specification; Letters Patent sealed.

AZÉMAR.
31st July 1867.

2215. JOHN CHRISTOPHER CÉSAR AZÉMAR, of Laurence Pountney Hill, in the City of London, for an invention for—"Improvements in boxes or apparatus for holding pieces of paper or other material for use or distribution."
Letters Patent sealed.

BROOMAN.
31st July 1867.

2216. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in fire-arms."—*A communication to him from abroad by Azel Storrs Lyman, of New York, United States of America.* *Letters Patent sealed.*

SAXBY. 31st July 1867.

2217. JOHN SAXBY, of the firm of Saxby and Farmer, Canterbury Road, Kilburn, Railway Signal Engineers, for an invention for—"Improvements in the construction of locking apparatus for governing the movement of railway points and signals, and in the mode or method of applying, combining and actuating such apparatus."
Letters Patent sealed.

SNELL. 1st August 1867.

2218. WILLIAM SNELL, of 16, Clements Inn, in the City of Westminster, for an invention for—"A new or improved engraving machine."—*A communication to him from abroad by John Corvosso Guerrant and Benton Jeremiah Field, both of Leaksville, in the County of Rockingham and State of North Carolina, United States of America.* *Letters Patent sealed.*

CALVERT. 1st August 1867.

2219. FRANCIS ALTON CALVERT, of the City of Manchester, Engineer, for an invention for—"Improvements in machinery and apparatus for cleaning and preparing fibrous substances, and for opening twisted yarns and woven fabrics."
Letters Patent sealed.

JOHNSON. 1st August 1867.

2220. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in umbrellas."—*A communication to him from abroad by Felix Asselin, of Paris, in the Empire of France.*
Letters Patent sealed and specification filed by order.

HOLMES. 1st August 1867.

2221. FREDERICK HALE HOLMES, at present residing in Paris, in the Empire of France, Engineer, for an invention for—"Improvements in apparatus for the production of the electric light." *Provisional protection only.*

KYLE. 1st August 1867.

2222. DAVID DUNNE KYLE, of Victoria Street, Westminster, for an invention for—"Communicating or signalling in and with railway trains."
Provisional protection NOT *granted.*

BOYMAN. 1st August 1867.

2223. RICHARD BOYMAN BOYMAN, of Stockwell Park Crescent, lately called Park Crescent, in the County of Surrey, for an invention for—"Improvements in the machinery for propelling vessels and aërial conveyances by reaction."
Letters Patent sealed.

QUIN. 1st August 1867.

2224. JAMES QUIN, of Leyland, near Preston, in the County of Lancaster, Manufacturer, for an invention for—"Improvements in the preparation of hose for conveying water, which improvements are also applicable for the preparation of woven fabrics for cart covers and other similar purposes." *Letters Patent sealed.*

NEWHALL. 1st August 1867.

2225. RICHARD NEWHALL, of Astwood Bank, in the County of Worcester, Needle Case Manufacturer, for an invention for—"Improvements in the manufacture of cases, envelopes or wrappers for needles and pins." *Letters Patent sealed.*

LAKE. 1st August 1867.

2226. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in pocket knives."—*A communication to him from abroad by L. B. Morris, of Hopkinsville, Kentucky, United States of America.* *Complete specification; Letters Patent sealed.*

LAKE. 1st August 1867.

2227. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Theodore Yates, of Milwaukee, Wisconsin, United States of America, a Major in the United States army.*
Complete specification; Letters Patent sealed.

TRANTER. 1st August 1867.

2228. WILLIAM TRANTER, of Birmingham, in the County of Warwick, Gun Maker, for an invention for—"Improvements in fire-arms." *Letters Patent sealed.*

NELSON. 1st August 1867.

2229. JAMES EDWARD NELSON, of Brook House, West Drayton, in the County of Middlesex, for an invention for—"Improvements in apparatus for conveying passengers and goods through the air." *Provisional protection only.*

HIGGS. 1st August 1867.

2230. SAMUEL HIGGS, junior, of Penzance, in the County of Cornwall, for an invention for—"Improvements in miners' safety lamps." *Provisional protection only.*

BIRCH. 1st August 1867.

2231. JOHN BIRCH, of Birmingham, in the County of Warwick, Machinist, for an invention for—"Improvements in machinery for cutting into lengths tapes or wax threads for vesta matches, and placing the said lengths in laths or clamps, and for cutting into lengths spills or other strips or rods." *Letters Patent sealed.*

POOLE.
2nd August 1867.

2232. JOHN POOLE, of 31, Riley Street, Chelsea, in the County of Middlesex, for an invention for—"Improvements in forming shafts, rollers, drums, and wheels with india-rubber surfaces." *Provisional protection only.*

DANCHELL.
2nd August 1867.

2233. FREDERICK LUDWIG HAHN DANCHELL, of Horwich, in the County of Lancaster, Civil Engineer, for an invention for—"Improvements in machinery and apparatus for preparing, shaping and drying peat and other vegetable and mineral substances." *Provisional protection only.*

EDWARDS.
2nd August 1867.

2234. JOHN EDWARDS, of Victoria Chambers, Westminster, for an invention for—"Improvements in machinery or apparatus for actuating and locking railway points and signals." *Letters Patent sealed.*

HARLOW.
2nd August 1867.

2235. BENJAMIN HARLOW, of Macclesfield, in the County of Chester, Mechanical Engineer, for an invention for—"Improvements in boilers or apparatus applicable to the generation of steam and to other purposes." *Complete specification; Letters Patent sealed.*

JOHNSON.
2nd August 1867.

2236. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in hydraulic lifts and in the mode of operating the same."—*A communication to him from abroad by Adolphe Le Bœuf, of Paris, in the Empire of France.* *Letters Patent sealed.*

MARLER.
2nd August 1867.

2237. EDWIN THOMAS MARLER, of Basinghall Street, in the City of London, Agent to Lawrence Brothers, Merchants, for an invention for—"Improvements in the method of and apparatus for clarifying sugar, which improvements are also applicable to other similar purposes."—*A communication to him from abroad by Benjamin Lawrence and Phineas Lawrence, both of John Street, New York, United States of America.* *Provisional protection only.*

DEWAR.
2nd August 1867.

2238. JAMES DEWAR, Doctor of Medicine, residing in Kirkcaldy, in the County of Fife, in North Britain, for an invention for—"Improvements in preserving substances for food." *Letters Patent sealed.*

KIRBY.
2nd August 1867.

2239. EDMUND ADOLPHUS KIRBY, of Gordon Square, in the County of Middlesex, Doctor of Medicine, for an invention for—"An improved system of dispensing medicines and preparing drugs therefor, together with an improved portable miniature dispensary and instrument case applicable to such system." *Letters Patent sealed.*

HORTON.
2nd August 1867.

2240. WILLIAM HORTON, of Sheffield, in the County of York, Boring-tool Maker, for an invention for—"Improvements in forge hammers." *Provisional protection only.*

ALLAN.
2nd August 1867.

2241. THOMAS ALLAN, of Adelphi Terrace, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in submarine telegraph cables and in the mode of joining the same." *Letters Patent sealed.*

TONGUE.
2nd August 1867.

2242. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in brakes for cotton lappers or scutchers."—*A communication to him from abroad by Richard Kitson, of Lowell, in the County of Middlesex and State of Massachusetts, United States of America.* *Letters Patent sealed.*

SMITH.
3rd August 1867.

2243. JOHN SMITH, of Cheetham, in the City of Manchester, Bleacher, Dyer and Finisher, for an invention for—"Improvements in machinery or apparatus for bowking, bleaching and cleansing textile fabrics and fibrous materials." *Letters Patent sealed.*

ELCE.
ELCE.
3rd August 1867.

2244. JOHN ELCE, of the City of Manchester, Machine Maker, and THOMAS ELCE, the younger, of Via Gellia, near Matlock, in the County of Derby, Cotton Spinner, for an invention for—"Improvements in machinery for spinning and doubling." *Letters Patent sealed.*

ABEL.
3rd August 1867.

2245. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in combined gas and air engines."—*A communication to him from abroad by Eugen Langen and Auguste Nicol Otto, both of Cologne, in the Kingdom of Prussia.* *Letters Patent sealed.*

BEWLEY. 3rd August 1867.

2246. RICHARD BEWLEY, junior, of Uttoxeter, in the County of Stafford, Engineer, for an invention for—"Improvements in rotary pumps for raising water or other liquids." *Provisional protection only.*

TOUAILLON. 3rd August 1867.

2247. CHARLES TOUAILLON, junior, of Paris, in the Empire of France, Civil Engineer, for an invention for—"A new and improved means of utilizing all the parts of all sorts of feathers."—*A communication from Jean Louis Frédéric Bardin, a person resident at No. 72, Boulevard Sébastopol, in Paris aforesaid, Manufacturer. Complete specification; Letters Patent sealed.*

RUSSELL. 3rd August 1867.

2248. JOHN RUSSELL, of the City of Manchester, in the County of Lancaster, for an invention for—"An improved system of flattening and straightening saws and similar plates or blades of steel during the process of hardening." *Letters Patent sealed.*

BUDENBERG. 3rd August 1867.

2249. ARNOLD BUDENBERG, of the firm of Schäffer and Budenberg, of Manchester, in the County of Lancaster, for an invention for—"Improvements in apparatus for indicating and registering the pressure of steam in steam generators, and the pressure in hydraulic presses and other vessels or chambers, which improvements are also applicable to indicating and registering pressure and vacuum in steam-engines, the vacuum in condensing apparatus, also to indicating and registering the combined pressure of the steam or other power employed to give motion to an engine, and the speed of such engine or other machinery, also to indicating and registering barometrical variations."—*A communication to him from abroad by Bernhard August Schäffer and Christian Friedrich Budenberg, of Buckau, Magdeburg, in the Kingdom of Prussia.* *Letters Patent sealed.*

FENTON. FENTON. 3rd August 1867.

2250. JOHN FREDERICK FENTON, and FRANK FENTON, both of Norfolk Lane, in the Parish of Sheffield, in the County of York, Silver Platers, for an invention for—"A new coffee injector." *Provisional protection only.*

GRACE. 3rd August 1867.

2251. WILLIAM RUSSELL GRACE, of Brooklyn, New York, United States of America, now of Rathdowney, Ireland, for an invention for—"Improvements in harrows."—*A communication to him from abroad by Halsey Haley Monroe, of Rockland, Maine, United States of America.* *Provisional protection only.*

HATFIELD. 3rd August 1867.

2252. JAMES THOMAS HATFIELD, of Hoboken, State of New Jersey, in the United States of America, late Merchant, for an invention for—"Improvements in watch cases, which improvements are also applicable to locket and miniature cases."—*A communication from William Henry Halsey, a person resident in said Hoboken. Letters Patent sealed.*

DINSDALE. 3rd August 1867.

2253. GEORGE WHITE DINSDALE, of Upper Norwood, in the County of Surrey, Plumber, for an invention for—"Improvements in the construction and manufacture of traps for waterclosets, drains and other purposes." *Letters Patent sealed.*

HUGHES. 3rd August 1867.

2254. WALTER WATSON HUGHES, of 14, Queen's Gate, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for propelling vessels and pumping or raising water." *Letters Patent sealed.*

WILSON. 3rd August 1867.

2255. WILLIAM WILSON, of the Borough and County of Newcastle-upon-Tyne, for an invention for—"Improvements in felting machines."—*A communication to him from abroad by James Seeley Taylor, a person resident at Danbury, Connecticut, United States of America.* *Letters Patent sealed.*

ANGUS. 5th August 1867.

2256. JOSEPH ANGUS, of The College, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in lamps burning with oils and other fluids."—*A communication to him from abroad by William Porter, of Belleville, State of New Jersey, United States of America.* *Provisional protection only.*

HUE. ROZIÈRE. 5th August 1867.

2257. LÉON VICTOR HUE, Mechanician, and CHARLES ROZIÉRE, Chemist, both of 36, Rue de Malte, Paris, in the Empire of France, for an invention for—"Improvements in the means of moulding subjects or designs in glass or crystal for ornamenting them inwardly, and improved tools or apparatus in connection therewith." *Letters Patent sealed.*

DALE. 5th August 1867.

2258. JAMES DALE, of 195, Upper Thames Street, E.C., for an invention for—"A refrigerator for cooling wort." *Provisional protection* NOT *granted.*

PUGHSLEY. 5th August 1867.

2259. WILLIAM JOHN PUGHSLEY, of Llantarnam, in the County of Monmouth, Manufacturing Chemist, for an invention for—"Improvements in obtaining sulphuric acid from the refuse 'pickle' or 'liquor' used in wire and galvanizing works." *Letters Patent sealed.*

BAMLETT. 5th August 1867.

2260. ADAM CARLISLE BAMLETT, of Thirsk, in the County of York, Agricultural Engineer, for an invention for—"Improvements in machinery for reaping and mowing." *Letters Patent sealed.*

DE NEGRI. 5th August 1867.

2261. CONSTANTINE DE NEGRI, of No. 84, Belsize Road, St. John's Wood, London, Engineer, for an invention for—"Improved machinery for reducing wood to shreds to be used in the manufacture of paper pulp." *Letters Patent sealed.*

TONGUE. 5th August 1867.

2262. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of wheeled and other carriages or vehicles."—*A communication to him from abroad by John Smalley Campbell, of Newton, in the County of Sussex and State of New Jersey, United States of America.* *Letters Patent sealed.*

SCHNEIDER. 5th August 1867.

2263. GEORGES SCHNEIDER, Gunsmith, of 14, Rue Ste. Anne, Paris, in the Empire of France, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

HEATON. 5th August 1867.

2264. JOHN HEATON, of Langley Mill, in the County of Derby, Consulting Engineer, for an invention for—"Improvements in blast furnaces." *Letters Patent sealed.*

PRANGLEY. 5th August 1867.

2265. WILLIAM PRANGLEY, of Salisbury, in the County of Wilts, for an invention for—"Improvements in apparatus employed in athletic exercises." *Letters Patent sealed; specification filed by order.*

LOCKWOOD. 5th August 1867.

2266. JOHN LOCKWOOD, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in steam-boiler and other furnaces." *Provisional protection only.*

WHITTAKER. ROURKE. 6th August 1867.

2267. THOMAS WHITTAKER, and MARTIN ROURKE, both of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in the preparation of waterproof paper." *Letters Patent sealed.*

BOLLAND. 6th August 1867.

2268. JOHN BOLLAND, of Blackburn, in the County of Lancaster, Engineer, for an invention for—"Improvements in furnaces for steam-boilers and other purposes." *Provisional protection only.*

CLARK. 6th August 1867.

2269. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in reeds for weaving."—*A communication to him from abroad by Laurent Perret, Merchant, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

LUTHRINGER. 6th August 1867.

2270. THÉOBALT LUTHRINGER, of Lyons, in the Empire of France, at present temporarily residing at the Hotel de France at de Belgique, Bloomsbury Square, in the County of Middlesex, for an invention for—"A new red colouring matter." *Letters Patent sealed.*

PARNACOTT. 6th August 1867.

2271. EDWARD JOSEPH WILLIAM PARNACOTT, of Leeds, in the County of York, Engineer, for an invention for—"An improved construction of trenail." *Letters Patent sealed.*

MURDOCH. 6th August 1867.

2272. HUNTER HENRY MURDOCH, of No. 7, Staple Inn, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in means or apparatus for sorting, screening and classifying corn, seeds, flour or other substances which it may be desirable to classify."—*A communication to him from abroad by Edmond Van Schepdael, of Brussels, in the Kingdom of Belgium, Agricultural Engineer, and Baptiste Bourgès, of Brussels, in the Kingdom of Belgium, Gentleman.* *Provisional protection only.*

RYLAND. 6th August 1867.

2273. FREDERICK RYLAND, of West Bromwich, in the County of Stafford, Iron-founder, for an invention for—"Improvements in pulleys for suspending window frames and for other like purposes." *Letters Patent sealed.*

JONES.
6th August 1867.

2274. MOSES JONES, of the firm of Jones and Rowe, of the City of Worcester, Ironmongers, for an invention for—"Improvements in kitchen ranges."
Letters Patent sealed.

CORNELY.
7th August 1867.

2275. EMIL CORNELY, of the City of Paris, Department of the Seine, Empire of France, Merchant, for an invention for—"Improvements in sewing-machines."
Letters Patent sealed.

MCDERMOTT.
7th August 1867.

2276. CHARLES MCDERMOTT, Gentleman, of 2, Carlton Villas, Wiltshire Road, Brixton, Surrey, for an invention for—"An eyelet and paper fastener combined."—*—A communication to him from abroad by Edward Boynton, of Tenth Street, First Avenue, New York, United States of America.* *Letters Patent sealed.*

PATERSON.
7th August 1867.

2277. ALEXANDER JOHN PATERSON, of Edinburgh, in the County of Midlothian, North Britain, Gentleman, for an invention for—"Improvements in cartridges and fire-arms." *Letters Patent sealed.*

MARSHALL.
STEWART.
7th August 1867.

2278. FRANCIS CARR MARSHALL, of Jarrow, in the County of Durham, and HUGH STEWART, of Liverpool, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases." *Letters Patent sealed.*

MICHELL.
7th August 1867.

2279. RICHARD HENRY MICHELL, of 21, Cockspur Street, Charing Cross, Westminster, in the County of Middlesex, Engineer, for an invention for—"Improvements in dredging machinery, and apparatus or appliances for the stowage and discharge of substances dredged up, the said apparatus or appliances being applicable to lighters, barges or vessels used for other purposes." *Letters Patent sealed.*

HAMER.
7th August 1867.

2280. MILTON HAMER, of Manchester, in the County of Lancaster, India-rubber Manufacturer, for an invention for—"Improvements in machinery for india-rubber thread cutting." *Letters Patent sealed.*

CRESSEY.
WEBB.
7th August 1867.

2281. THOMAS STOKES CRESSEY, and JOHN WEBB, of Burton-on-Trent, for an invention for—"Improvements in apparatus for shrinking cloth."
Letters Patent sealed.

HORSLEY.
7th August 1867.

2282. ERASMUS THOMAS HORSLEY, of Pye Bridge, Alfreton, in the County of Derby, Engineer, for an invention for—"Improvements in treating cast iron."
Letters Patent sealed.

BINNS.
7th August 1867.

2283. JOSEPH PICKLES BINNS, of the firm of Binns, Chatterton and Smith, Engineers, Machine and Tool Makers, Lady Bridge Iron Works, Leeds, for an invention for—"Improvements in machinery for the manufacture of paper bags."
Provisional protection only.

HOLCROFT.
DACK.
8th August 1867.

2284. GEORGE HOLCROFT, and WILLIAM NATHAN DACK, both of the City of Manchester, Engineers, for an invention for—"Certain improvements in steam-engines." *Provisional protection only.*

CLARK.
8th August 1867.

2285. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved metallic alloy and in the applications of the same."—*A communication to him from abroad by Georges Achille Schmitte and Hilaire André Levallois, Metal Manufacturers, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

BENSON.
BARKER.
8th August 1867.

2286. CHARLES BENSON, of Leeds, in the County of York, Ironfounder, and JOSEPH BARKER, of Forster Street, Hunslet, near the said Leeds, Moulder, for an invention for—"Improvements in apparatus for preparing moulds for the casting of pipes, cylinders, pillars, rollers and other forms." *Letters Patent sealed.*

WITHERS.
8th August 1867.

2287. HENRY WILLIAM WITHERS, of New Cross, in the County of Kent, for an invention for—"Improvements in the construction of boats."
Letters Patent sealed.

WIRTH.
8th August 1867.

2288. FRANCIS WIRTH, of the firm of Wirth and Co., Patent Agents, Frankfort-o/-Maine, Germany, for an invention for—"An improved machine for stamping letters."—*A communication from Johann Carl Wilhelm Maas and Carl Fischer, both of Hamburg, Germany.* *Letters Patent sealed.*

LÜDEKE.
8th August 1867.

2289. JOHANN ERNST FRIEDRICH LÜDEKE, of Dransfeld, in the Kingdom of Prussia, at present residing at 281, New Cross Road, New Cross, for an invention for—"Improvements in apparatus for obtaining motive-power and for raising and forcing water and fluids." *Provisional protection only.*

LAKE.
8th August 1867.

2290. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in printing presses."—*A communication to him from abroad by Edwin Allen, of Norwich, Connecticut, United States of America.* *Provisional protection only.*

BAKER.
9th August 1867.

2291. THOMAS JAMES BAKER, of Farndon, near Newark, in the County of Nottingham, Miller, for an invention for—"Improvements in the manufacture of wheat and other grain into flour, and in the machinery connected therewith." *Letters Patent sealed.*

DAWSON.
9th August 1867.

2292. WILLIAM RICHARD DAWSON, of Windsor Chambers, Great Saint Helens, in the City of London, Gentleman, for an invention for—"Improvements in the preparation of titaniferous iron sands for smelting." *Letters Patent sealed.*

SEYMOUR.
9th August 1867.

2293. FREDERICK JULIUS SEYMOUR, of the City and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Manufacturer, for an invention for—"An improved case or box for holding twine or cord." *Letters Patent sealed.*

AVERY.
PENABERT.
9th August 1867.

2294. HENRY AUGUSTUS AVERY, and GEORGES PENABERT, Merchants, of Paris, in the French Empire, for an invention for—"The application of a certain vegetable powder for removing and preventing incrustations in boilers." *Letters Patent sealed.*

MILLER.
9th August 1867.

2295. WILLIAM JOHN MILLER, of New York, in the United States of America, now residing at Birmingham, in the County of Warwick, Merchant, for an invention for—"Improvements in table knives and forks."—*The result partly of a communication made to him from abroad by Frederick Jeremiah Miller, of Brooklyn, in the State of New York, United States of America, and partly of invention and discovery made by him.* *Provisional protection only.*

HEATHFIELD.
9th August 1867.

2296. RICHARD HEATHFIELD, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in machinery for the manufacture of cut nails."—*A communication to him from abroad by John Henry Geary, of Fairhaven, Massachusetts, United States of America.* *Letters Patent sealed.*

HOHGREFE.
9th August 1867.

2297. CAROLINE HOHGREFE (Widow), of No. 3, Frankfort Street, Brunswick, Germany, for an invention for—"Improvements in apparatus to be applied to chimney tops." *Letters Patent sealed.*

BONNEVILLE.
10th August 1867.

2298. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in stringed instruments having sound boards."—*A communication from Joseph Henri Marchisio, a person resident at Turin, in the Kingdom of Italy.* *Provisional protection only.*

BARLOW.
10th August 1867.

2299. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in doubling and winding machines."—*A communication to him from abroad by John Dollfus-Mieg, of the firm of Messieurs Dollfus-Mieg and Company, of Mulhouse and Dornach, in the Empire of France.* *Letters Patent sealed.*

DAVENPORT.
KITSON.
10th August 1867.

2300. JOHN DAVENPORT, of Bradford, in the County of York, Machine Maker, and JOHN KITSON, of Bradford aforesaid, Pattern Maker, for an invention for—Improvements in or applicable to slide valves for admitting the flow or passage of steam, water or other fluids and gases when pressed." *Letters Patent sealed.*

NEWBY.
10th August 1867.

2301. EDWARD NEWBY, Ship and Whitesmith, of 17, Sun Street, Bishopsgate Street Without, London, E.C., for an invention for—"Improvements in shackles or joining links." *Letters Patent sealed; no specification filed.*

HODGSON. 10th August 1867.

2302. GEORGE HODGSON, of Thornton Road, Bradford, in the County of York, Machine Maker, for an invention for—"Improvements in looms for weaving and in means or apparatus for the manufacture of parts of such looms."
Letters Patent sealed.

CLARK. 10th August 1867.

2303. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in refrigerating apparatus applicable for the manufacture of ice and for other refrigerating purposes."—*A communication to him from abroad by Jean Baptiste Toselli, Manufacturer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

WARSOP. 10th August 1867.

2304. GEORGE WARSOP, of 60, Mount Street, Nottingham, for an invention for —"Improvements in apparatus for cleaning windows." *Letters Patent sealed.*

GIRDWOOD. 10th August 1867.

2305. ROBERT GIRDWOOD, of Edinburgh, in the County of Mid Lothian, North Britain, Wool Broker, for an invention for —"An improved composition to be applied to sheep and other animals, for the purposes of destroying vermin and parasitical life thereon, and for protecting them therefrom." *Letters Patent sealed.*

EDMONDSON. 10th August 1867.

2306. RICHARD EDMONDSON, of the firm of Brooke and Edmondson, of Bank Top Mill, Blackburn, in the County of Lancaster, Manufacturers, for an invention for —"Improvements in the construction and manufacture and in tools for the manufacture of pickers used in looms for weaving." *Letters Patent sealed.*

HOLMES. 10th August 1867.

2307. FREDERIC HALE HOLMES, at present residing in Paris, in the Empire of France, Engineer, for an invention for—"Improvements in apparatus for the production of the electric light." *Letters Patent sealed.*

ABEL. 12th August 1867.

2308. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"An improved method or process for removing sulphur, phosphorus and other impurities from iron, steel and other metals."—*A communication to him from abroad by John Francis Bennett, of Pittsburgh, Pennsylvania, United States of America.* *Provisional protection only.*

MOUNIER. 12th August 1867.

2309. ETIENNE MOUNIER, of the City of Paris, in the Empire of France, Merchant, for an invention for—"Improvements in penholders."
Provisional protection only.

COURTIN. 12th August 1867.

2310. EREMBERT COURTIN, Drug Merchant, of 2, George Lane, Eastcheap, London, for an invention for—"Improvements in the construction of machines for splitting or for splitting and cutting sarsaparilla and other woody or vegetable fibrous substances."—*A communication to him from abroad by Monsieur Gruvel, fils, of 13, Rue Folie Mericourt, Paris, in the Empire of France.* *Letters Patent sealed.*

TURNER. HEMSLEY. 12th August 1867.

2311. ARCHIBALD TURNER, of Leicester, Elastic Fabric Manufacturer, and WILLIAM HEMSLEY, of Melbourne, in the County of Derby, Silk Manufacturer, for an invention for—"Improvements in the manufacture of gloves, undershirts, drawers, socks, stockings, and other articles of clothing which are usually made from knitted or looped fabrics." *Letters Patent sealed.*

EVERS. 12th August 1867.

2312. JOHANN HEINRICH EVERS, of Altona, in the Kingdom of Prussia, Civil Engineer, but now residing in the Minories, in the City of London, for an invention for—"Improved apparatus for generating steam." *Provisional protection only.*

WILSON. 12th August 1867.

2313. EDWARD BROWN WILSON, of Bolton, in the County of Lancaster, Engineer, for an invention for—"Improvements in furnaces."
Provisional protection only.

MCDOUGALL. 12th August 1867.

2314. ARTHUR MCDOUGALL, of the firm of McDougall Brothers, of the City of Manchester, Manufacturing Chemist, for an invention for—"Improvements in the extraction and separation of the sulphur contained in products resulting from the alternate exposure of certain metallic oxides to gases containing sulphuretted hydrogen and to oxygen." *Letters Patent sealed and specification filed by order.*

SHANKS. CARGILL. 12th August 1867.

2315. JAMES SHANKS, of Arbroath, in the County of Forfar, North Britain, and JOHN CARGILL, of Leadenhall Street, in the City of London, for an invention for—"Improvements in lawn-mowing machines." *Letters Patent sealed.*

RAWLINGS. WILKERSON. 12th August 1867.

2316. JOSEPH JAMES RAWLINGS, of Moor End Works, Melbourn, in the County of Cambridge, Agricultural Implement Manufacturer, and HENRY WILKERSON, of Eversden, in the same County, Coprolite Merchant, for an invention for—"Improvements in machinery or apparatus for washing coprolites." *Provisional protection only.*

SWENSON. HEILMANN. 12th August 1867.

2317. WALFRID SWENSON, and JOHAN ERNST HEILMANN, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved appliance to be used for securing and holding railway tickets and labels." *Provisional protection only.*

ELEY. 12th August 1867.

2318. WILLIAM THOMAS ELEY, of the firm of Eley Brothers, of Gray's Inn Road, in the County of Middlesex, for an invention for—"Improvements in the means employed for rendering cartridges or cartridge cases for fire-arms waterproof." *Letters Patent sealed.*

DAVIES. 13th August 1867.

2319. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improvement in centrifugal apparatus for washing sugar."—*A communication to him from abroad by George E. Evans, of Boston, Massachusetts, in the United States of America.* *Provisional protection only.*

EVERIST. 13th August 1867.

2320. HENRY THOMAS EVERIST, of the Gas Works, Kidderminster, in the County of Worcester, for an invention for—"Improvements in apparatus used in the manufacture of gas." *Letters Patent sealed.*

SCORE. 13th August 1867.

2321. EDWARD SCORE, of St. John's Park, Hampstead, in the County of Middlesex, Compositor, for an invention for—"Improvements in quoins or wedges for fixing type or blocks in their chases, and in appliances used therefor." *Provisional protection only.*

BRIGHT. 13th August 1867.

2322. JOHN JAMES BRIGHT, of Bristol, in the County of Gloucester, Master Mariner, for an invention for—"Improved gear for actuating screw and other like propellors of navigable vessels by manual, animal or motive-power engine, and for elevating, lowering, connecting or disconnecting such propellors." *Letters Patent sealed.*

PILLING. PILLING. JENNINGS. 13th August 1867.

2323. GEORGE PILLING, and JOHN PILLING, of Halifax, in the County of York, Dyers, and FREDERICK JENNINGS, of the same place, Mechanic, for an invention for—"Improvements in machinery for 'saving' or covering the lists or edges of fabrics." *Letters Patent sealed.*

STURTEVANT. 13th August 1867.

2324. BENJAMIN FRANKLIN STURTEVANT, of West Roxbury, in the County of Norfolk and State of Massachusetts, of the United States of America, for an invention for—"Improvements in blowers for furnaces and other purposes." *Complete specification; Letters Patent sealed.*

MELLOR. 13th August 1867.

2325. HENRY MOSES MELLOR, of the firm of Moses Mellor and Sons, Arkwright Street, Nottingham, for an invention for—"Improvements in circular knitting frames." *Letters Patent sealed.*

WYBRANTS. 13th August 1867.

2326. SILVESTER RAIT WYBRANTS, of Dundee, in the County of Forfar, North Britain, for an invention for—"Improvements in utilizing certain waste materials and in manufacturing packing therefrom." *Provisional protection only.*

SWAN. 13th August 1867.

2327. ALEXANDER SWAN, of Kirkcaldy, in the County of Fife, Manufacturer, for an invention for—"Improvements in apparatus for evaporating or recovering lees." *Provisional protection only.*

HALLIDAY. 13th August 1867.

2328. MICHAEL FREDERICK HALLIDAY, of South Kensington, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

BADGER. 13th August 1867.

2329. JOHN BADGER, of the City of Worcester, Ironmonger, for an invention for—"Improvements in kitchen or cooking ranges." *Letters Patent sealed.*

FLOWER. 13th August 1867.

2330. CHARLES EDWARD FLOWER, of Stratford-upon-Avon, in the County of Warwick, Brewer, for an invention for—"Improvements in cooling brewers' worts and beer." *Letters Patent sealed.*

FAWCETT.
13th August 1867.

2331. JOHN FAWCETT, of Kirton-in-Lindsey, in the County of Lincoln, for an invention for — "Improved apparatus for extracting oils from oleaginous seeds and nuts, and making oil cake or compound cake for cattle feeding."
Letters Patent sealed.

WALKER.
13th August 1867.

2332. THOMAS WALKER, of West Hartlepool, in the County of Durham, Timber Merchant, for an invention for—"Improvements in machinery for cutting grooves in knotchboard of stairs, ladder strings, uprights for louvre boards, and in other articles requiring such grooves." *Letters Patent sealed.*

TURNEY.
ACKROYD.
13th August 1867.

2333. WILLIAM TURNEY, and JOHN ACKROYD, both of the Town and County of the Town of Nottingham, Machine Builders and Jacquard Makers, for an invention for—"Improvements in jacquard machinery or apparatus used in the production of figured or ornamental lace and other fabrics."
Provisional protection only.

LEACHMAN.
HOLROYD.
14th August 1867.

2334. WILLIAM BRADSHAW LEACHMAN, and JOHN HOLROYD, both of Leeds, in the County of York, for an invention for—"Improved apparatus for pumping fluids." *Letters Patent sealed.*

CLARK.
14th August 1867.

2335. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in fastenings for securing bayonets on fire-arms."—*A communication to him from abroad by Paul Ambrose Oliver, of New York City, in the United States of America.* *Letters Patent sealed.*

HOLLIDAY.
14th August 1867.

2336. CHARLES HOLLIDAY, of Huddersfield, in the County of York, Color Manufacturer, for an invention for—"Improvements in means or apparatus for printing woven and other fabric or material." *Letters Patent sealed.*

JONES.
HOWSON.
GJERS.
14th August 1867.

2337. JOHN ALLCOCK JONES, RICHARD HOWSON, and JOHN GJERS, all of Middlesbrough-on-Tees, in the County of York, Engineers, for an invention for—"Improvements in puddling and other furnaces employed for melting, boiling or heating iron." *Letters Patent sealed.*

BOWER.
14th August 1867.

2338. CHRISTOPHER FABIAN BOWER, of Brighton, in the County of Sussex, Cabinet Maker, for an invention for—"An improved combined bed, couch and chair for the use of invalids." *Provisional protection only.*

BETTS.
14th August 1867.

2339. WILLIAM BETTS, of No. 1, Wharf Road, City Road, in the County of Middlesex, Capsule Manufacturer, for an invention for—"Improvements in metallic capsules for bottles and other like receptacles." *Letters Patent sealed.*

BETTS.
14th August 1867.

2340. WILLIAM BETTS, of No. 1, Wharf Road, City Road, in the County of Middlesex, Capsule Manufacturer, for an invention for—"Improvements in metallic capsules for bottles and other like receptacles." *Letters Patent sealed.*

BUXTON.
BANN.
14th August 1867.

2341. GEORGE BUXTON, of Fenton, in the County of Stafford, Engineer, and SAMUEL BANN, of Crewe, in the County of Chester, Mechanical Draftsman, for an invention for—"Improvements applicable to axles of engines and carriages for railways and other roads." *Letters Patent sealed.*

WILLIAMSON.
14th August 1867.

2342. ALEXANDER WILLIAM WILLIAMSON, of 12, Fellows Road, N.W., for an invention for—"Improvements in lamps." *Provisional protection only.*

BESSEMER.
14th August 1867.

2343. HENRY BESSEMER, of Queen Street Place, Cannon Street, in the City of London, for an invention for—"Improvements in ordnance and machinery to be used in throwing projectiles, part of which machinery is applicable for other purposes."
Letters Patent sealed.

WAY.
14th August 1867.

2344. JOHN THOMAS WAY, of Russell Road, Kensington, in the County of Middlesex, for an invention for—"Improvements in treating phosphate of lime for the manufacture of manure and for other purposes." *Letters Patent sealed.*

PEACOCK.
15th August 1867.

2345. JONATHAN PEACOCK, of Rockford, Illinois, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Brewer, for an invention for—"An improved machine for cleaning barrels or casks."
Complete specification; Letters Patent sealed.

WENHAM.
15th August 1867.

2346. FRANCIS HERBERT WENHAM, of 1, Union Road, Clapham, in the County of Surrey, Engineer, for an invention for—"Improvements in heated air-engines."
Letters Patent sealed.

BUSHBY.
15th August 1867.

2347. THOMAS BUSHBY, of the City of Manchester, in the County of Lancaster, Chemist, for an invention for—"Improvements in pill-making machines."
Letters Patent sealed.

COSGRAVE.
15th August 1867.

2348. JOHN COSGRAVE, of Liverpool, in the County of Lancaster, Baker, for an invention for—"Improvements in apparatus employed in the heating of bakers' ovens." *Provisional protection only.*

CLELAND.
CUNNINGHAM.
15th August 1867.

2349. ROBERT CLELAND, and ROBERT CUNNINGHAM, both of Paisley, in the County of Renfrew, North Britain, for an invention for—"A new manufacture of woven fabrics imitating fabrics woven with horse-hair." *Provisional protection only.*

ORMEROD.
15th August 1867.

2350. EDWARD ORMEROD, of Atherton, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in safety apparatus to be employed for preventing accidents in winding coals and other minerals from mines."
Letters Patent sealed.

BAIRD.
15th August 1867.

2351. AUGUSTUS FRASER BAIRD, of Pimlico, in the County of Middlesex, Lieutenant-Colonel in the Bengal Staff Corps, for an invention for—"An improved earth closet." *Letters Patent sealed.*

BODART.
SIGODART.
15th August 1867.

2352. HENRY BODART, Mechanical Engineer, and ALFRED SIGODART, Mechanical Engineer, both of Gosselies, in the Kingdom of Belgium, for an invention for—"Improvements in apparatus for propelling vessels."
Complete specification; Letters Patent sealed.

LAKE.
15th August 1867.

2353. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in metal ties or bands for securing bales of cotton or other substance."—*A communication to him from abroad by John Wesley Hedenberg, of Chicago, Illinois, United States of America.*
Provisional protection only.

CLARKE.
16th August 1867.

2354. GEORGE CLARKE, of Southwell House, Lower Heath, Hampstead, in the County of Middlesex, for an invention for—"Improvements in fire-escapes."
Provisional protection only.

DAY.
DORBER.
16th August 1867.

2355. JOHN DAY, of Manchester, in the County of Lancaster, and WILLIAM DORBER, of the same place, for an invention for—"Certain improvements in the manufacture and construction of cabs, coaches, carriages, omnibuses and other similar vehicles." *Letters Patent sealed.*

HENRY.
16th August 1867.

2356. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the method of and apparatus for treating certain vegetable substances in order to obtain fibrous materials and paper pulp therefrom."—*A communication to him from abroad by Charles Gastaldetti and Joseph Vanzina, both of 33, Boulevart Saint Martin, Paris, France.*
Letters Patent sealed.

FRANKENBURG.
PHILLIPS.
16th August 1867.

2357. HYMAN FRANKENBURG, of Skinner Street, and SAMUEL PHILLIPS, of Whitechapel, both in the County of Middlesex, Bag and Legging Makers, for an invention for—"A new or improved fastening particularly applicable for leggings and gaiters." *Provisional protection only.*

JOSEPH.
16th August 1867.

2358. REBECCA JOSEPH, of Westminster Road, in the County of Surrey, Corset Manufacturer, for an invention for—"Improvements in stays or corsets."
Letters Patent sealed.

JACKSON.
16th August 1867.

2359. THOMAS JACKSON, of 21, Orchard Street, Portman Square, in the County of Middlesex, for an invention for—"Improvements in pianoforte actions."
Provisional protection only.

DUDLEY.
16th August 1867.

2360. JOHN WILLIAM DUDLEY, of Drummond Road, Bermondsey, in the County of Surrey, Engineer, for an invention for—"Improvements in machinery for cutting corks." *Letters Patent sealed.*

WAVISH.
17th August 1867.

2361. JAMES WAVISH, of Torpoint, in the County of Cornwall, Ironmonger, for an invention for—"Apparatus applicable to the heating of greenhouses, causing bottom heat to plants, and other heating purposes." *Provisional protection only.*

LEVESON.
17th August 1867.

2362. ALEXANDER LEVESON, of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in hoods or coverings for 'perambulators,' 'Bath chairs,' carriages and other vehicles." *Letters Patent sealed.*

AVOYNE-BAINÉE. SIBILLAT. 17th August 1867.

2363. LOUIS AVOYNE-BAINÉE, of No. 22, Rue des Boulangers, St. Victor, Paris, and MARIE JOSEPH SIBILLAT, of No. 7, Boulevart Bonne Nouvelle, Paris, both Metallic Bed Manufacturers, for an invention for—"An improved metallic spring mattress." *Provisional protection only.*

LEES. RHODES. 17th August 1867.

2364. ASA LEES, of the Soho Iron Works, Greenacres Moor, Oldham, in the County of Lancaster, Machine Maker, and WILLIAM HENRY RHODES, of Hollinwood, near the City of Manchester, Machinist, for an invention for—"Improvements in machines for spinning and doubling cotton, wool and other fibrous substances." *Letters Patent sealed.*

SAGAR. RICHMOND. 17th August 1867.

2365. THOMAS SAGAR, Machine Maker, and THOMAS RICHMOND, Manufacturer, both of Burnley, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

HOLROYD. FIELDHOUSE. 17th August 1867.

2366. JAMES HOLROYD, of Leeds, in the County of York, Manufacturer, and WILLIAM FIELDHOUSE, of Batley, also in the County of York, Manufacturer, for an invention for—"An improved method of twisting or doubling yarns in mule spinning machinery." *Provisional protection only.*

FROW. 17th August 1867.

2367. MARK FROW, of Leake, in the County of Lincoln, Farmer, for an invention for—"Improvements in reaping machines." *Letters Patent sealed.*

CLARK. 17th August 1867.

2368. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the construction of moulds for casting aluminium and other metal plates for artificial teeth, also in the method of casting said plates and securing the teeth therein, and in apparatus connected therewith, part of which improvements is applicable for producing other fine metal castings."—*A communication to him from abroad by James Baxter Bean, of Baltimore, in the State of Maryland, United States of America.* *Letters Patent sealed.*

DIXON. BUTTERY. 17th August 1867.

2369. JAMES WILLIS DIXON, junior, of Oakfield House, Sheffield, and WILLIAM BUTTERY, of Albion Street, Sheffield, both in the County of York, for an invention for—"Improvements in apparatus for turning or closing cartridges for breech-loading fire-arms." *Letters Patent sealed.*

HOUGHTON. 17th August 1867.

2370. FREDERICK BURNETT HOUGHTON, of Grove House, West Reading, in the County of Berks, for an invention for—"Improvements in treating products obtained when operating on wood and other vegetable substances to obtain fibre therefrom." *Letters Patent sealed.*

POCOCK. 17th August 1867.

2371. WILLIAM WILLMER POCOCK, of Craven Street, in the City of Westminster, Architect, for an invention for—"Improvements in indexes or tell-tales applicable to fluid meters and other counting or measuring apparatus." *Letters Patent sealed.*

CAHEN. 17th August 1867.

2372. MAYER CAHEN, Merchant, of Paris, Rue Grenelle St. Honoré, 37, in the French Empire, for an invention for—"An improved apparatus for sealing letters, envelopes and other papers." *Letters Patent sealed.*

GOULTY. 17th August 1867.

2373. WALLIS RIVERS GOULTY, of Reading, in the County of Berks, Engineer and Manager to the Reading Iron Works, Limited, for an invention for—"Improvements in machinery for cutting, crushing, bruising or otherwise preparing furze or gorse, straw, bark or other vegetable substances." *Letters Patent sealed.*

TUNSTILL. 19th August 1867.

2374. THOMAS TUNSTILL, of Burnley, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Improved means and apparatus for preparing size for warps or other purposes." *Letters Patent sealed.*

CRONIER. 19th August 1867.

2375. JOHN CRONIER, of No. 18, Lucan Place, Hoxton, in the County of Middlesex, Boot and Shoe Maker, for an invention for—"An improved rotary heel for boots and shoes." *Provisional protection only.*

ADAMS. 19th August 1867.

2376. WILLIAM BRIDGES ADAMS, of Woodstock Lodge, Blackheath, in the County of Kent, Engineer, for an invention for—"Improvements in uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures." *Provisional protection only.*

HOOKER.
BRABY.
19th August 1867.

2377. JOHN HOOKER, of No. 16, Oberstein Road, New Wandsworth, in the County of Surrey, and FREDERICK BRABY, of Fitzroy Works, Euston Road, in the County of Middlesex, for an invention for—"Improvements in fire lighters also applicable for fuel generally." *Provisional protection only.*

BROOMAN.
19th August 1867.

2378. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"An improved mode or improved means of coloring or ornamenting fabrics and other surfaces, and of preparing printing surfaces."—*A communication to him from abroad by Charles Depoully, of Paris, France.* *Letters Patent sealed.*

NEWTON.
19th August 1867.

2379. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in crank motions."—*A communication to him from abroad by Thomas Taylor, of New Orleans, in the State of Louisiana, United States of America.* *Letters Patent sealed.*

PARKES.
PARKES.
19th August 1867.

2380. FRANCIS PARKES, and GEORGE PARKES, both of Birmingham, in the County of Warwick, Spade, Shovel and General Edge Tool Manufacturers, for an invention for—"Certain improvements in spades and shovels." *Provisional protection only.*

REIFERT.
19th August 1867.

2381. CLEMENS REIFERT, of Frankfort-on-the-Main, Germany, for an invention for—"Improvements in railway carriages." *Letters Patent sealed.*

COWPER.
19th August 1867.

2382. EDWARD ALFRED COWPER, of No. 35A, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in the construction of safes for containing articles of value." *Provisional protection only.*

MARTIN.
20th August 1867.

2383. ALEXANDRE MARTIN, of Middle Street, Clothfair, in the County of Middlesex, Bonnet Shape Manufacturer, for an invention for—"Improvements in apparatus for uniting the brims to hat shapes or foundations." *Provisional protection only.*

BURROW.
20th August 1867.

2384. WALTER BURROW, of Great Malvern, in the County of Worcester, Dealer in Mineral Waters, for an invention for—"An improved rack for mineral or aërated waters or other liquids in bottles." *Letters Patent sealed.*

DIXON.
20th August 1867.

2385. WALTER DIXON, of 57, Marsham St., Westminster, Clothier, in the County of Middlesex, for an invention for—"Improvements in means of and apparatus for the preservation of life from fire, and for raising or lowering persons or goods from buildings." *Provisional protection only.*

CRIDLAND.
20th August 1867.

2386. HENRY CRIDLAND, of Bradford, in the County of York, Woolstapler, for an invention for—"Improved applications to be used for removing the wool or hair from the skins of animals." *Letters Patent sealed.*

STOCKER.
20th August 1867.

2387. ALEXANDER SOUTHWOOD STOCKER, of Lambs Conduit Works, Artillery Street, Bermondsey, London, for an invention for—"Improvements in bottles and in the manufacture of caps or covers for the same." *Letters Patent sealed.*

COHEN.
20th August 1867.

2388. ADOLPH COHEN, of Birmingham, in the County of Warwick, Merchant, for an invention for—"Improvements in watches."—*A communication to him from abroad by Humbert Ramuz, of Chaux de Fonds, in the Canton of Neufchatel, Switzerland, Watch Maker.* *Letters Patent sealed.*

MURGATROYD.
21st August 1867.

2389. JOSHUA MURGATROYD, of Heaton Norris, in the County of Lancaster, Millwright and Engineer, for an invention for—"Improvements in the construction of steam-boilers and apparatus connected therewith." *Letters Patent sealed.*

BOSTOCK.
21st August 1867.

2390. WILLIAM BOSTOCK, of the firm of Hollins and Bostock, of Manchester, in the County of Lancaster, Commission Agent, for an invention for—"Improvements in spools, reels or bobbins, and in the method of manufacturing the same." *Letters Patent sealed.*

HALL.
21st August 1867.

2391. CHARLES EDWARD HALL, of Meadow Lane, Leeds, in the County of York, Engineer, for an invention for—"Improved means or apparatus for hoeing, thinning or chopping out turnips or any other root crops requiring such process." *Letters Patent sealed.*

THOMAS. 21st August 1867.

2392. WILLIAM THOMAS, of Liverpool, in the County of Lancaster, Carriage Manufacturer, for an invention for—"Improvements in apparatus for registering the number of passengers carried in omnibuses."—*A communication to him from abroad by Louis Auguste Gille and François Beatry, of Paris, in the Empire of France.* *Letters Patent sealed.*

ROBINSON. SMITH. 21st August 1867.

2393. JOHN ROBINSON, of Rochdale, in the County of Lancaster, Engineer, and JOHN SMITH, of the same place, Engineer, for an invention for—"Improvements in applying motive-power to saw frames." *Letters Patent sealed.*

LUYCKX. 21st August 1867.

2394. GUSTAVE LUYCKX, India-Rubber Manufacturer, of the City of Brussels, in the Kingdom of Belgium, for an invention for—"Improvements in the manufacture of waterproof tubes." *Letters Patent sealed.*

SIEMENS. 21st August 1867.

2395. CHARLES WILLIAM SIEMENS, of No. 3, Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in furnaces and in processes and apparatus in connection therewith, principally applicable to metallurgical operations." *Letters Patent sealed.*

SAINTY. 21st August 1867.

2396. JOHN SAINTY, of Burnham Westgate, in the County of Norfolk, Agricultural Engineer, for an invention for—"Improvements in hurdles, lifts and fencing for agricultural and other purposes." *Provisional protection only.*

GOUCHER. 21st August 1867.

2397. JOHN GOUCHER, of Church Walk Iron Works, Worksop, in the County of Nottingham, Engineer, Ironfounder and Machinist, for an invention for—"Improvements in an apparatus for preserving life in water, and propelling, floating or manœuvering in water any body, vessel or mechanical contrivance, and for floating or manœuvering in the air any mechanical contrivance." *Letters Patent sealed.*

NAPIER. 21st August 1867.

2398. JAMES MURDOCH NAPIER, of York Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in coining presses." *Letters Patent sealed.*

MANGNALL. 21st August 1867.

2399. JOHN MANGNALL, of Glasgow, in the County of Lanark, North Britain, Commercial Traveller, for an invention for—"Improvements in elastic mattresses." *Letters Patent sealed.*

WIDDOWSON. 21st August 1867.

2400. THOMAS WIDDOWSON, of Weston Street, Sheffield, in the County of York, Commercial Traveller, for an invention for—"Improvements in the manufacture of umbrellas and parasols." *Letters Patent sealed.*

SMALLEY. CROASDALE. LEAVER. 22nd August 1867.

2401. AARON SMALLEY, Draper, of Preston, and BENJAMIN CROASDALE, Innkeeper, of Blackburn, and WILLIAM LAURENCE LOWE LEAVER, Draper, of Blackburn, all in the County of Lancaster, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

SAULT. 22nd August 1867.

2402. THOMAS SAULT, of New Haven, Connecticut, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Engineer, for an invention for—"Improvements in slide valves." *Letters Patent sealed.*

NEWARK. 22nd August 1867.

2403. JOHN NEWARK, of the City of Coventry, in the County of Warwick, Engineer and Gunsmith, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

LYNES. 22nd August 1867.

2404. SAMUEL LYNES, of Burley, near Leeds, in the County of York, for an invention for—"An improved self-acting lubricator." *Letters Patent sealed.*

KING. LOWDEN. GARTSIDE. 22nd August 1867.

2405. ROBERT KING, JOHN LOWDEN, and WILLIAM GARTSIDE, all of Oldham, in the County of Lancaster, for an invention for—"Certain impovements in carding-engines." *Letters Patent sealed.*

NEWSOME. 22nd August 1867.

2406. WILLIAM NEWSOME, of Sheffield, in the County of York, Engineer, for an invention for—"Improved apparatus for cutting or forming metal joints." *Provisional protection only.*

HOWARD. 22nd August 1867.

2407. DAVID HOWARD, of Dobcross, in the County of York, for an invention for—"Certain improvements in the manufacture of fabrics termed 'union flannels,' and in other similar 'union' fabrics." *Complete specification; Letters Patent sealed.*

CLARK. 22nd August 1867.

2408. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for raising water or other liquids by steam power."—*A communication to him from abroad by William Lewis Horne, of Batavia, Kane County, State of Illinois, United States of America.*

Letters Patent sealed.

JONES. JONES. 22nd August 1867.

2409. JOSEPH JONES, and FREDERICK JAMES JONES, both of Birmingham, in the County of Warwick, for an invention for—"Improvements in cartridges for breech-loading fire-arms." *Letters Patent sealed.*

MARSHALL. 22nd August 1867.

2410. JAMES GARTH MARSHALL, of Leeds, in the County of York, Flax Spinner, for an invention for—"Improvements in solvent or detergent processes."

Letters Patent sealed.

HIGGINS. WHITWORTH. 22nd August 1867.

2411. HENRY HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvements in machinery for preparing cotton and other fibrous materials for spinning." *Provisional protection only.*

LAWSON. 22nd August 1867.

2412. THOMAS WALMSLEY LAWSON, of Liverpool, in the County of Lancaster, Steam Ship Broker, for an invention for—"Improvements in the construction of ships and vessels." *Letters Patent sealed.*

MCINTYRE. 22nd August 1867.

2413. JOHN MCINTYRE, of Jarrow, in the County of Durham, Ship Builder, for an invention for—"Improvements in the mode of covering and protecting iron plates from the action of sea-water." *Letters Patent sealed.*

NORTON. HAWKSLEY. 22nd August 1867.

2414. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, and GEORGE HAWKSLEY, of Montrose Villas, Caledonian Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in apparatus and means for burning combustible liquids, vapours and gases, to obtain heat and light therefrom." *Letters Patent sealed.*

ZIFFER. GOODBRAND. 23rd August 1867.

2415. FERDINAND ZIFFER, of Bury, in the County of Lancaster, and WALTER GOODBRAND, of Salford, in the same County, Engineers, for an invention for—"Improvements in the method of warming carriages employed in the conveyance of passengers on railways." *Provisional protection only.*

WHITTAKER. 23rd August 1867.

2416. DAVID WHITTAKER, of Blackburn, in the County of Lancaster, for an invention for—"Improvements in healds or heddles used in looms for weaving."

Provisional protection only.

BONNEVILLE. 23rd August 1867.

2417. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"An improved self-acting cooking apparatus."—*A communication from Juan Sörensen, a person resident at Avenue D'Antin, in the City of Paris aforesaid, Gentleman.*

Letters Patent sealed.

TAYLOR. 23rd August 1867.

2418. DANIEL TAYLOR, of Hatton Garden, in the County of Middlesex, Chaser, for an invention for—"Improvements in the means of stopping or closing bottles and other vessels of capacity." *Provisional protection only.*

ASHTON. 23rd August 1867.

2419. WILLIAM SHORROCK ASHTON, of Darwen, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in metallic packing to be employed for the 'glands' and 'stuffing boxes' of valves or cylinders used for steam or liquid." *Provisional protection only.*

LAKE. 23rd August 1867.

2420. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the manufacture of iron and steel, and in apparatus employed in the said manufacture."—*A communication to him from abroad by Virgil Warren Blanchard, of Bridport, Vermont, United States of America.* *Complete specification; Letters Patent sealed.*

DANA. 23rd August 1867.

2421. EDWARD AUGUSTUS DANA, of Brookline, in the County of Norfolk and State of Massachusetts, in the United States of America, for an invention for—"Improvements in the construction of concussion fuzes for the explosion of projectiles." *Complete specification; Letters Patent sealed.*

VARLEY.
23rd August 1867.

2422. JOHN VARLEY, of 57, Bloomsfield Road, Plumstead, in the County of Kent, for an invention for—"Improvements in apparatus for raising, supplying and measuring water to steam-boilers, part of which invention is also applicable to measuring water for other purposes." *Letters Patent sealed*

ALLIBON.
WILSON.
24th August 1867.

2423. GEORGE ALLIBON, and EDWARD WILSON, of the City of Worcester, in the County of Worcester, Engineers, for an invention for—"Improvements in apparatus or gearing for steering ships." *Letters Patent sealed.*

CASH.
CASH.
24th August 1867.

2424. JOHN CASH, and JOSEPH CASH, junior, both of the City of Coventry, Manufacturers, for an invention for—"An improvement in the manufacture of towels." *Letters Patent sealed.*

WIGZELL.
WIGZELL.
24th August 1867.

2425. ATWOOD WIGZELL, and EUSTACE WIGZELL, of the firm of Timothy Bates and Co., of Sowerby Bridge, in the County of York, Engineers and Millwrights, for an invention for—"Improvements in or applicable to Juckes' furnace." *Letters Patent sealed.*

PHILLIPS-SMITH.
24th August 1867.

2426. JOHN PHILLIPS-SMITH, of Hereford, in the County of Hereford, Engineer, for an invention for—"An improved mode of and apparatus for hauling draining and other agricultural implements in the field by steam power, and also an improved truck for mounting and carrying such implements from place to place." *Provisional protection only.*

HANSON.
24th August 1867.

2427. JOHN HANSON, of The Bush, in the County of Antrim, Ireland, Farmer and Land Agent, for an invention for—"Improvements in agricultural apparatus for spacing and digging roots." *Letters Patent sealed.*

SAMUELSON.
24th August 1867.

2428. MARTIN SAMUELSON, of Hull, in the County of York, Engineer, for an invention for—"Improvements in sewing-machines." *Provisional protection only.*

NEWTON.
24th August 1867.

2429. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved fastening for paper bags and paper parcels."—*A communication to him from abroad by Charles Edwin Atwood and George Warren Davis, both of New York City, in the United States of America.* *Letters Patent sealed.*

DAVEY.
DAVY.
24th August 1867.

2430. HENRY DAVEY, of Gunnislake, in the County of Cornwall, and DAVID DAVY, of Sheffield, in the County of York, Engineers, for an invention for—"Improvements in apparatus for supplying or feeding water to steam-boilers and other vessels." *Provisional protection only.*

LAKE.
24th August 1867.

2431. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in cartridges for breech-loading fire-arms."—*A communication to him from abroad by John Webster Cochran, of the City and State of New York, United States of America.* *Letters Patent sealed.*

KNIAGHININSKY.
GALAHOFF.
OSSIPOFF.
24th August 1867.

2432. PIERRE KNIAGHININSKY, of Saint Petersburgh, PIERRE GALAHOFF, of Saint Petersburgh, and NICOLAS OSSIPOFF, of Kozloff, in the Empire of Russia, Gentlemen, all now residing at No. 20, Rue Saint George, Avenue de Clichy, in the City of Paris, in the Empire of France, for an invention for—"Improvements in machinery for setting up and distributing printing types." *Letters Patent sealed.*

CLEAVER.
24th August 1867.

2433. FREDERICK JOHN CLEAVER, of the firm of Frederick Samuel Cleaver and Son, of 32 and 33, Red Lion Street, in the County of Middlesex, Wholesale Perfumers and Fancy Soap Makers, for an invention for—"Improvements in screw presses and apparatus for pressing and moulding soap, or for pressing, moulding, packing or stamping other materials." *Letters Patent sealed.*

BERRY.
24th August 1867.

2434. WILLIAM BERRY, of 4, Willow Place, Stamford Hill, in the County of Middlesex, for an invention for—"Improvements in the means or apparatus for removing mud, drift or other rubbish from streets and other places." *Letters Patent sealed.*

THURGAR.
26th August 1867.

2435. WALTER CHRISTOPHER THURGAR, of the City of Norwich, Surgeon, for an invention for—"Improvements in apparatus for regulating the supply of gas to burners." *Letters Patent sealed.*

SONSTADT.
26th August 1867.

2436. EDWARD SONSTADT, of the Parish of Maughold, in the Isle of Man, Gentleman, for an invention for—"Improvements in the treatment of seaweed for obtaining valuable products from it." *Letters Patent sealed.*

LAKE.
26th August 1867.

2437. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"A new green colour."—*A communication to him from abroad by Edward Wiederhold, of Cassel, in the Kingdom of Prussia, Chemist.*
Provisional protection only.

HASELTINE.
27th August 1867.

2438. GEORGE HASELTINE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of iron and steel."—*A communication to him from abroad by Alexander Lyman Holley, of the State, County and City of New York, United States of America, Mechanical Engineer.*
Letters Patent sealed and specification filed by order.

MUIR.
27th August 1867.

2439. WILLIAM MUIR, of the City of Montreal, in the Dominion of Canada, at present residing at 63, Pentonville Road, in the County of Middlesex, Merchant, for an invention for—"Improvements in machinery or apparatus for stitching or ornamenting and uniting fabrics." *Letters Patent sealed.*

WEBB.
27th August 1867.

2440. JOHN WHITMARSH WEBB, of No. 4, Woolwich Common, in the County of Kent, a Captain in Her Majesty's Navy, for an invention for—"Improvements in reefing topsails from the deck." *Letters Patent sealed.*

GEDGE.
27th August 1867.

2441. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved machine intended to divide, break or crush all substances capable of being triturated, more especially bones and horny substances of every kind, for converting them into manure."—*A communication to him from abroad by Eugène Anduze, of 15, Passage des Petites Ecuries, Paris, France, Manufacturer.*
Provisional protection only.

BIGELOW.
27th August 1867.

2442. ERASTUS BRIGHAM BIGELOW, of Boston, United States of America, at present residing at the Queen's Hotel, Manchester, for an invention for—"Improvements in jacquard power looms and in apparatus for driving looms."
Provisional protection only.

ETAIX.
27th August 1867.

2443. JACQUES AUGUSTE ALFRED ETAIX, of No. 4, Brydges Street, Covent Garden, in the County of Middlesex, Law Student, for an invention for—"Improvements in hand screw propellers." *Provisional protection only.*

SOUL.
27th August 1867.

2444. MATTHEW AUGUSTUS SOUL, of No. 3, Leadenhall Street, in the City of London, Patent Agent, for an invention for—"Improvements in fastening iron bands on bales, and in fasteners or ties for that purpose, and also in levers or implements to be used therewith for effecting the fastening."—*A communication to him from abroad by Jones Saunders, of Alexandria, in Egypt, but formerly of Greenwich, in the County of Kent, Engineer.* *Provisional protection only.*

SAGAR.
RICHMOND.
28th August 1867.

2445. THOMAS SAGAR, Machine Maker, and THOMAS RICHMOND, Manufacturer, both of Burnley, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

HANSON.
28th August 1867.

2446. HENRY HANSON, of Stockport, in the County of Chester, Hemp and Flax Spinner, and Rope, Twine and Cotton Band Manufacturer, for an invention for—"Improvements in machinery or apparatus employed for finishing cotton band, twine, ropes, cordage and other fibrous substances."
Provisional protection only.

BOYCE.
HARRINGTON.
28th August 1867.

2447. JAMES EDWARD BOYCE, of Birmingham, in the County of Warwick, Manufacturer, and ROBERT HARRINGTON, of Birmingham aforesaid, Warehouseman, for an invention for—"Improvements in umbrellas and parasols."
Letters Patent sealed.

WILSON.
COWBURN.
28th August 1867.

2448. WILLIAM WILSON, of Radcliffe, in the County of Lancaster, and JAMES COWBURN, of the same place, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

TANDY.
28th August 1867.

2449. GEORGE GRAINGER TANDY, of Anerley Road, Penge, in the County of Surrey, Gentleman, for an invention for—"Improvements in the preparation of vulcanizable compounds and in the manufacture of articles therefrom."
Provisional protection only.

PEDDER.
28th August 1867.

2450. WILLIAM PEDDER, of Savage Gardens, in the City of London, for an invention for—"Improvements in brushes." *Letters Patent sealed.*

ELLIOTT.
28th August 1867.

2451. JOHN ELLIOTT, of Southampton, in the County of Hants, Civil Engineer, for an invention for—"Improvements in machinery used in cutting coal, stone, slate and other minerals, and in forming tunnels and galleries, and for other quarrying purposes." *Provisional protection only.*

JOHNSON.
28th August 1867.

2452. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for the aëration of fresh water obtained by the distillation of sea water."—*A communication to him from abroad by Theodore Perroy, at present residing at Paris, in the Empire of France, Marine Engineer.* *Complete specification; Letters Patent sealed.*

STOREY.
BICKERDIKE.
WILSON.
28th August 1867.

2453. JOSEPH STOREY, and WILLIAM EDWARD BICKERDIKE, both of the Town and County of Lancaster, and WILLIAM VIRGO WILSON, of Jubilee Street, Mile End, in the County of Middlesex, for an invention for—"A new method of bronzing metallic and other surfaces." *Complete specification; Letters Patent sealed.*

WATTS.
FLEETWOOD.
28th August 1867.

2454. WILLIAM THOMAS WATTS, of Birmingham, in the County of Warwick, Metal Dealer, and DANIEL JOSEPH FLEETWOOD, of the same place, Manufacturer, for an invention for—"Improvements in and applicable to hydraulic and other presses, parts of which improvements may be employed for or with other descriptions of machinery." *Letters Patent sealed.*

SMITH.
28th August 1867.

2455. WILLIAM BORTHWICK SMITH, of the City of Coventry, Watch Manufacturer, for an invention for—"An improved construction of lever-watch movements." *Letters Patent sealed.*

EDWARDS.
28th August 1867.

2456. ROBERT EDWARDS, of Ashford, in the County of Kent, Engineer, for an invention for—"Improvements in the construction of locomotive traction engines." *Provisional protection only.*

MACINTOSH.
BOGGETT.
29th August 1867.

2457. JOHN MACINTOSH, of North Bank, Regent's Park, and WILLIAM BOGGETT, of Lindsey Houses, Chelsea, both in the County of Middlesex, for an invention for—"Improvements in springs for boots and shoes." *Letters Patent sealed.*

ABEL.
29th August 1867.

2458. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"A new or improved process for the direct production of phosphorus for industrial purposes."—*A communication to him from abroad by Edouard Aubertin and Lèopold Boblique, both of Paris, in the Empire of France.* *Provisional protection only.*

SIMLICK.
29th August 1867.

2459. HENRY JOSEPH SIMLICK, of 2, Lefevre Road, Bow, in the County of Middlesex, Chemical Light Manufacturer, for an invention for—"Improvements in cigar and pipe lights, and in their mode of construction, composition and manufacture." *Letters Patent sealed.*

STEWART.
29th August 1867.

2460. ALEXANDER STEWART, of Hamilton, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in textile fabrics and in the apparatus or means employed for effecting the same." *Letters Patent sealed.*

DOUGLAS.
29th August 1867.

2461. JOSEPH DOUGLAS, of Bloomsbury Street, in the County of Middlesex, Range Manufacturer, for an invention for—"Improvements in the means of ventilating and regulating the draught of close fire ranges or kitcheners." *Letters Patent sealed.*

SLAGG.
29th August 1867.

2462. CHARLES SLAGG, of Kingston-on-Thames, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in the application of sewage and other liquid manures to land." *Provisional protection only.*

DYSON.
DYSON.
MARTIN.
29th August 1867.

2463. JOHN DYSON, and GEORGE WALTER DYSON, both of Tinsley, in the County of York, and STEPHEN MARTIN, of Sheffield, in the same County, for an invention for—"An improved mode of cutting up iron and steel rails and rail ends in order to utilize them." *Letters Patent sealed.*

PAULIN.
PAULIN.
29th August 1867.

2464. JOHN PAULIN, and ROBERT DAVISON PAULIN, of Newcastle-on-Tyne, in the County of Northumberland, Engineers, for an invention for—"Improvements in apparatus for feeding paints on the stone or stones on which they are to be ground." *Letters Patent sealed.*

MUIR.
29th August 1867.

2465. WILLIAM MUIR, of 57, Claverton Street, Pimlico, in the City of Westminster, Engineer and Machinist, for an invention for—"Improvements in apparatus for starting, propelling and stopping railway trains or carriages, and ships or vessels." *Letters Patent sealed.*

CLARK.
29th August 1867.

2466. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for submarine exploration."—*A communication to him from abroad by George Wrightson, of New York City, in the United States of America.* *Provisional protection only.*

NEWTON.
29th August 1867.

2467. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved steering apparatus."—*A communication to him from abroad by Thomas William Murray, of New York City, in the United States of America.* *Provisional protection only.*

WIER.
WIER.
29th August 1867.

2468. ARTHUR MCNUTT WIER, and MARSHALL ARTHUR WIER, of Elm Lodge, Newton Road, Bayswater, in the County of Middlesex, for an invention for—"Improvements in signalling and indicating apparatus." *Letters Patent sealed.*

NEWTON.
29th August 1867.

2469. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in rudders."—*A communication to him from abroad by Thomas William Murray, of New York City, in the United States of America.* *Provisional protection only.*

SILVESTER.
30th August 1867.

2470. JOHN SILVESTER, of the firm of George Salter and Company, of West Bromwich, in the County of Stafford, Manufacturers, for an invention for—"Improvements in spring balances." *Letters Patent sealed.*

CLARK.
30th August 1867.

2471. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the mode of removing and cutting the hides of animals for the manufacture of driving bands or tubes of leather."—*A communication to him from abroad by Alois Eschenlohr, Master Tanner, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

WEARE.
30th August 1867.

2472. ROBERT WEARE, of 22, St. John's Square, Wolverhampton, for an invention for—"Improvements in furnaces." *Provisional protection only.*

DIXON.
30th August 1867.

2473. ISAAC DIXON, of the firm of Dixon and Sleight, of Liverpool, in the County of Lancaster, Contractors, for an invention for—"An improved submerged propeller for navigable vessels." *Letters Patent sealed.*

HAMMERSTEIN.
30th August 1867.

2474. MORRIS HAMMERSTEIN, of Liverpool, in the County of Lancaster, for an invention for—"Improvements applicable to cigars, cheroots, cigarettes, pipes and other smoking tubes."—*A communication to him from abroad by Moritz Star, of Leipsig, in Saxony.* *Letters Patent sealed.*

BRANDON.
31st August 1867.

2475. ALEXANDER HORACE BRANDON, Civil Engineer, of No. 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"An improved carpet stretcher and tack driver."—*A communication to him from abroad by William Brown, of New York, United States of America.* *Complete specification; Letters Patent sealed.*

BROWN.
31st August 1867.

2476. JOHN ARMITAGE BROWN, of Kingsland Crescent, Kingsland Road, in the County of Middlesex, for an invention for—"Improved apparatus for propelling ships and other vessels and for actuating machinery applicable to other purposes." *Letters Patent sealed.*

MATTHEWS.
31st August 1867.

2477. WILLIAM JAMES MATTHEWS, of Albert Place, New Street, Alma Street, Aston New Town, Birmingham, in the County of Warwick, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

AUBERT.
31st August 1867.

2478. WILLIAM AUBERT, of 96, Strand, in the County of Middlesex, for an invention for—"Improvements in apparatus for diffusing odours or perfumes." *Provisional protection only.*

FENTON.
SANDILANDS.
31st August 1867.

2479. ALBERT FENTON, of Redditch, in the County of Worcester, Machinist, and JAMES SANDILANDS, of Redditch aforesaid, Fishing Rod Maker, for an invention for—"Improvements in machinery to be employed in the manufacture of fish hooks." *Provisional protection only.*

NICOLL.
31st August 1867.

2480. DONALD NICOLL, of Oaklands Hall, West End, Kilburn, in the County of Middlesex, Esquire, for an invention for—"Improvements in electric telegraph conductors and in the means of laying and securing the same, also in the machinery and apparatus to be employed therein." *Letters Patent sealed.*

DUTTON.
2nd September 1867.

2481. EDWARD KENWORTHY DUTTON, of the Patent Office, 3, Smithy Door, Manchester, in the County of Lancaster, Consulting Engineer, for an invention for—"Improvements in window sash fasteners, which are also employed to sustain the window sashes in any desired position when the window is opened."—*A communication to him from abroad by James Chase Butterworth, junior, of Providence, Rhode Island, United States of America.* *Provisional protection only.*

COOPER.
COOPER.
2nd September 1867.

2482. HENRY OCTAVIUS WILLIAM COOPER, and ELIZABETH FOSTER COOPER, of 95, St. George's Road, in the Parish of St. George's, Hanover Square, for an invention for—"A liquid or composition (of a deodorizing nature) mixed with water, whereby roads, streets and other places are kept moist and free from dust, for several days after once watering." *Letters Patent sealed.*

WATSON.
2nd September 1867.

2483. RICHARD WATSON, of Liverpool, in the County of Lancaster, Fire-proof Safe Manufacturer, for an invention for—"Improvements in brakes for railway trains, parts of which can be used or applied for signalling on trains in motion." *Provisional protection only.*

GELSTHARP.
2nd September 1867.

2484. CHARLES GELSTHARP, of Wincomble Low, Walker, near Newcastle-on-Tyne, in the County of Northumberland, for an invention for—"Improvements in the manufacture of malleable iron, cast iron and steel, and in the construction of furnaces to be employed for such purposes." *Letters Patent sealed.*

NEWTON.
2nd September 1867.

2485. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved manufacture of tool for cutting stone."—*A communication to him from abroad by William Shaw Campbell, of Dresden, in the Kingdom of Saxony.* *Letters Patent sealed.*

VALLANCE.
2nd September 1867.

2486. HENRY VALLANCE, of Farnham Royal, in the County of Bucks, Gentleman, for an invention for—"Improvements in fastenings suitable for casement windows." *Letters Patent sealed.*

TESSIER.
3rd September 1867.

2487. CHARLES TESSIER, of No. 181, Rue du Faubourg St. Martin, Paris, in the Empire of France, for an invention for—"Improvements in the apparatus for moderating or regulating the feeding of the pulp in paper machines."—*A communication to him by Jean Baptiste de Mulder, a person resident at Nivelles, in the Kingdom of Belgium.* *Letters Patent sealed.*

PAPE.
3rd September 1867.

2488. WILLIAM ROCHESTER PAPE, of Newcastle-upon-Tyne, in the County of the same Town, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms." *Complete specification; Letters Patent sealed.*

FIELD.
NATION.
3rd September 1867.

2489. ARTHUR FIELD, of the firm of John, Charles and John Field, of Upper Marsh, Lambeth, and WILLIAM BRYER NATION, of No. 394, Old Kent Road, both in the County of Surrey, for an invention for—"Improvements in ornamenting candles and in apparatus or machinery employed for that purpose." *Letters Patent sealed.*

LEIGH.
3rd September 1867.

2490. ALFRED LEIGH, of Baguley, in the County of Chester, for an invention for—"An improved compound or composition to be employed in sizing and finishing woven fabrics and yarns." *Provisional protection only.*

MCKECHNIE.
3rd September 1867.

2491. JOHN MCKECHNIE, of Glasgow, in the County of Lanark, North Britain, General Merchant, for an invention for—"Improvements in apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses." *Provisional protection only.*

GELHAYE.
3rd September 1867.

2492. ACHILLE EDWARD GELHAYE, of Windmill Road, Croydon, in the County of Surrey, Engineer, for an invention for—"Improvements in machines for manufacturing chains, cords, ropes, and the manner of making such chains, cords and ropes." *Letters Patent sealed.*

LUNDE.
3rd September 1867.

2493. PETER FREDERICK LUNDE, of West Square, St. George's Road, in the County of Surrey, Engineer, for an invention for—"Improved apparatus for obtaining extracts from vegetable substances." *Letters Patent sealed.*

ROBBINS.
3rd September 1867.

2494. EDWARD YOUNG ROBBINS, of Cincinnati, Ohio, United States of America, for an invention for—"Improvements in fire grates." *Letters Patent sealed.*

LE GRAS.
3rd September 1867.

2495. LOUIS NAPOLEON LE GRAS, of Wardour Street, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in milk cans." *Provisional protection only.*

ARCHER.
3rd September 1867.

2496. ELISHA THOMAS ARCHER, of Great Trinity Lane, in the City of London, for an invention for—"Improvements in spring mattresses." *Letters Patent sealed.*

CLARK.
3rd September 1867.

2497. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improved machinery for cutting, carving and engraving upon ivory, wood, stone, metals and other substances."—*A communication to him from abroad by Isaac Hall, of New York City, in the United States of America.* *Letters Patent sealed.*

SMITH.
4th September 1867.

2498. GEORGE SMITH, of Upper Thames Street, in the City of London, Merchant, for an invention for—"Improvements in ladders suitable for fire-escapes and other purposes." *Provisional protection only.*

CRANE.
4th September 1867.

2499. GEORGE CRANE, of 91, Vauxhall Walk, Lambeth, Surrey, for an invention for—"Improvements for speedily and effectually removing snow from roads and streets." *Provisional protection only.*

GRAHAM.
4th September 1867.

2500. HUGH GARDINER GRAHAM, Bookkeeper, of Blackburn, in the County of Lancaster, for an invention for—"An apparatus for heating, boiling, agitating and raising size and other liquids." *Provisional protection only.*

WELDON.
4th September 1867.

2501. WALTER WELDON, of Park Villa, West Hill, Highgate, in the County of Middlesex, for an invention for—"Improvements in the production of artificial oxides of manganese, and in the manufacture of chlorine by means thereof, partly applicable also to other purposes." *Letters Patent sealed.*

HOWARD.
4th September 1867.

2502. GEORGE WILLIAM HOWARD, of Gloucester Street, Queen Square, in the County of Middlesex, Gun Maker's Assistant, for an invention for—"Improved apparatus to be used in the manufacture of ball cartridges." *Provisional protection only.*

DŒRING.
4th September 1867.

2503. FREDERICK BERNARD DŒRING, of Duke Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in machinery for boring, cutting or working in rock, coal and other mineral." *Letters Patent sealed.*

SMYTHIES.
4th September 1867.

2504. JOHN KINNERSLEY SMYTHIES, of 23, St. Luke's Road, in the Parish of Paddington, in the County of Middlesex, Barrister-at-Law, for an invention for—"Carrying passengers through the air by a steam bird or flying steam-engine fitted with wings flapped by the action of steam." *Letters Patent sealed.*

PATTISON.
PATTISON.
4th September 1867.

2505. FREDERICK HOPE PATTISON, and JAMES WILLIAM HENRY PATTISON, both of the City of Glasgow, in the County of Lanark, North Britain, Merchants, for an invention for—"A new or improved metal-founders' blacking." *Provisional protection only.*

BOUSFIELD.
4th September 1867.

2506. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in paddle wheels for water craft."—*A communication to him from abroad by William Robinson Manley, a person resident at the City, County and State of New York, United States of America.* *Complete specification; Letters Patent sealed.*

HOWARD.
BOUSFIELD.
4th September 1867.

2507. JAMES HOWARD, of Bedford, Agricultural Implement Manufacturer, and EDWARD TENNEY BOUSFIELD, of the same place, Engineer, for an invention for—"Improvements in machinery for cutting grass or corn." *Letters Patent sealed.*

BUCHHOLZ.
4th September 1867.

2508. GUSTAV ADOLPH BUCHHOLZ, of Shepherd's Bush, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery for hulling wheat and manufacturing semolina." *Letters Patent sealed.*

JONES.
HEDGES.
5th September 1867.

2509. RALPH AUGUSTINE JONES, and JOHN COOPER HEDGES, both of Aylesbury, in the County of Buckingham, for an invention for—"Improvements in fire-escapes." *Letters Patent sealed.*

HENDERSON.
5th September 1867.

2510. ARTHUR CHARLES HENDERSON, of 31, Charing Cross, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of appliqué embroidery on tulle, muslin or similar fabrics in various colours and designs."—*A communication to him from abroad by Jean François Planus, jeune, of 31, Rue d'Enghien, Paris, in the Empire of France.* *Provisional protection only.*

KITSON.
5th September 1867.

2511. WILLIAM H. KITSON, of 3, Victoria Terrace, Leeds, for an invention for—"Improvements in railway wheels." *Letters Patent sealed.*

POTHIER.
5th September 1867.

2512. LOUIS BENJAMIN POTHIER, of New Orleans, in the United States of America, Merchant, now temporarily residing at Paris, in the Empire of France, for an invention for—"Improvements in fastening or securing metal bands or hoops on cotton and other bales."—*A communication to him from abroad by Daniel Swett, of Vicksburgs, in the United States of America.* *Provisional protection only.*

CARTER.
EDWARDS.
5th September 1867.

2513. HENRY CARTER, and GEORGE HENRY EDWARDS, both of Dempsey Street, Stepney, in the County of Middlesex, Gunmakers, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

COPE.
5th September 1867.

2514. GEORGE COPE, of the firm of Cope Brothers and Company, of Liverpool, in the County of Lancaster, Cigar Manufacturers, for an invention for—"Improved apparatus for pressing and shaping cigar bunches." *Letters Patent sealed.*

FORD.
5th September 1867.

2515. JOHN FORD, of Reading, in the County of Berks, Wheelwright, for an invention for—"Improvements in means for securing wheels, pulleys, cranks and other articles on their shafts or axles." *Letters Patent sealed.*

HENDERSON.
MACINTOSH.
5th September 1867.

2516. JOHN SHARP HENDERSON, and JOHN MACINTOSH, both of the City and County of Aberdeen, North Britain, for an invention for—"Improvements in the manufacture of metallic cases or canisters, and in the machinery or apparatus employed therefor." *Letters Patent sealed.*

PIERCE.
5th September 1867.

2517. GEORGE HENRY PIERCE, of Yatton, in the County of Somerset, Gentleman, for an invention for—"Improvements in padding for horse collars, saddles and harness." *Provisional protection only.*

BERNHEIM.
WILSON.
LONGWORTH.
5th September 1867.

2518. EDWARD BERNHEIM, of Bradford, in the County of York, GEORGE WILLIAM WILSON, of the same place, and EDWIN LONGWORTH, of Levenshulme, in the County of Lancaster, for an invention for—"Improvements in the treatment and method of preparing printed warps." *Provisional protection only.*

HANDYSIDE.
5th September 1867.

2519. JAMES BAIRD HANDYSIDE, of Glasgow, in the Kingdom of Scotland, Engineer, for an invention for—"An improved construction of railway buffer." *Letters Patent sealed.*

NEWTON.
5th September 1867.

2520. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction and fitting up of safety valves for steam-boilers or generators."—*A communication to him from abroad by George William Richardson, of Troy, in the State of New York, United States of America.* *Letters Patent sealed.*

GARDNER.
5th September 1867.

2521. HENRY GARDNER, of Manchester, in the County of Lancaster, Agent, for an invention for—"Improvements in connection with miners' safety lamps." *Letters Patent sealed.*

VERSMANN.
5th September 1867.

2522. FREDERIC VERSMANN, of 190, High Street, Stratford, in the County of Essex, Ph. D., Consulting and Analytical Chemist, for an invention for—"Improvements in the manufacture of varnishes." *Letters Patent sealed.*

SEWARD.
6th September 1867.

2523. NOBLE SEWARD, M.D., of Riversdale, Templeogue, in the County of Dublin, Ireland, for an invention for—"Improved means and apparatus for producing motive-power." *Provisional protection only.*

CASSAN.
6th September 1867.

2524. SAUL CASSAN, of No. Eleven, Grafton Street, Tottenham Court Road, in the Parish of Saint Pancras, in the County of Middlesex, Chemist, for an invention for—"A new or improved preparation or material to be used for the purpose of affording instant relief to persons afflicted with asthma or subject to any other affections of the lungs or chest." *Provisional protection only.*

HODSON.
MATHER.
RISLEY.
6th September 1867.

2525. THOMAS HODSON, WILLIAM MATHER, and JAMES RISLEY, all of Bedford, in the County of Lancaster, for an invention for—"Improvements in lubricating shafts and other similar frictional surfaces." *Provisional protection only.*

CREAMER.
6th September 1867.

2526. WILLIAM GAUDLY CREAMER, of Woburn Place, Russell Square, in the County of Middlesex, Engineer, for an invention for—"Improved apparatus for excluding dust from railway carriages." *Letters Patent sealed.*

HELLIWELL. 6th September 1867.

2527. THOMAS WILLIAM HELLIWELL, of Brighouse, in the County of York, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

CLARK. 6th September 1867.

2528. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the construction of ships and other vessels."—*A communication to him from abroad by Amand Graucher, Engineer, of 29, Boulevart St Martin, Paris.* *Letters Patent sealed.*

TONGUE. 6th September 1867.

2529. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 31, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of garments for male and female attire."—*A communication to him from abroad by Leander Wolcott Boynton, of the City and County of Hartford, in the State of Connecticut, United States of America.* *Letters Patent sealed.*

COOK. 7th September 1867.

2530. THOMAS COOK, of Pitt Street, Old Kent Road, in the County of Surrey, Engineer and Machinist, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

HICKS. 7th September 1867.

2531. JAMES JOSEPH HICKS, of Hatton Garden, in the County of Middlesex, for an invention for—"Improvements in means or apparatus employed for lighting gas and other jets or lamps, candles, cigars and other articles." *Provisional protection only.*

COCKSHOOT. 7th September 1867.

2532. JOSEPH COCKSHOOT, junior, of Manchester, in the County of Lancaster, for an invention for—"Improvements in the manufacture of carriages, coaches and other vehicles." *Provisional protection only.*

SMITH. 7th September 1867.

2533. JOHN SMITH, of Bradford, in the County of York, Engineer, for an invention for—"Improvements in machinery for combing or dressing silk, flax, China-grass, cotton or other fibrous substances." *Letters Patent sealed.*

ROGERS. 7th September 1867.

2534. JOHN BANTING ROGERS, of St. Andrew's Road, Hastings, in the County of Sussex, for an invention for—"A projectile anchor and block for launching of the life-boat and other boats in rough weather, and for ships' use in cases of loss of anchorage." *Letters Patent sealed.*

ARMSTRONG. ECCLESTON. 7th September 1867.

2535. JAMES ARMSTRONG, of Birmingham, in the County of Warwick, Engineer, and EDWIN ECCLESTON, of Birmingham aforesaid, Engineer, for an invention for—"Improvements in steam-engines." *Provisional protection only.*

HUBNER. 7th September 1867.

2536. EMILE HUBNER, Engineer, of 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"An improved rotary steam or gas engine, also applicable for pumping and measuring liquids." *Provisional protection only.*

PAYNE. 7th September 1867.

2537. DAVID PAYNE, of Otley, in the County of York, Engineer, for an invention for—"Improvements in printing machinery." *Letters Patent sealed.*

BAYLEY. BAYLEY. 7th September 1867.

2538. JOHN BAYLEY, and THOMAS BAYLEY the younger, both of Lenton, in the County of Nottingham (of the firm of Messieurs T. I. & T. Bayley, of Lenton Works, situate at Lenton, in the said County of Nottingham, Leather Dressers), for an invention for—"Improvements in the manufacture or production of leather." *Letters Patent sealed.*

STEVENS. 7th September 1867.

2539. BENJAMIN FRANKLIN STEVENS, of No. 17, Henrietta Street, Covent Garden, in the County of Middlesex, Gentleman, for an invention for—"An improved illuminating roof and roof pavement."—*A communication to him from abroad by Thaddeus Hyatt, of Atchison, Kansas, in the United States of America.* *Letters Patent sealed.*

WOODS. 7th September 1867.

2540. HAMILTON WOODS, of Liver Foundry, Sunnyside, Ordsal Lane, Salford, Manchester, in the County of Lancaster, for an invention for—"Improvements in presses for extracting liquid from hops, seeds and other substances." *Provisional protection only.*

WHITHAM. 7th September 1867.

2541. JAMES WHITHAM, of Perseverance Iron Works, Kirkstall Road, Leeds, in the County of York, for an invention for—"Improvements in machinery for puddling and in puddling and other furnaces." *Letters Patent sealed.*

EWER. 7th September 1867.

2542. RICHARD WRIGHT EWER, of Old Change, Cheapside, in the City of London, for an invention for—"Improvements in winders suitable for folding or making up ribbon velvets for the market." *Letters Patent sealed.*

BURN.
9th September 1867.

2543. CHARLES BURN, of 3, Middle Scotland Yard, in the City of Westminster, in the County of Middlesex, for an invention for—"A new mode of propelling railway or other carriages." *Provisional protection only.*

WELCH.
9th September 1867.

2544. EDWARD JOHN COWLING WELCH, of Harrow, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus for producing artificial ice, parts of such apparatus being also applicable to other purposes." *Letters Patent sealed.*

PAUL.
9th September 1867.

2545. ANDREW PAUL, of Dumbarton, in the County of Dumbarton, North Britain, Engineer, for an invention for—"Improvements in stoppers or controllers for ships' cables." *Provisional protection only.*

GEDGE.
9th September 1867.

2546. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Processes of extraction of the coloring matter of indigo from the waste textile fabrics which contain it."—*A communication to him from abroad by Constant Bernard, Paul Scheurer and Jean Baptiste Tempé, all of Colmar (Haut Rhin), France.* *Provisional protection only.*

LAKE.
9th September 1867.

2547. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved cartridge holder."—*A communication to him from abroad by Charles Howlett, Charles Hobby Pond, Jacob Rutser Schuyler, Marcellus Hartley and Malcolm Graham, all of the City and State of New York, United States of America, Merchants.* *Letters Patent sealed.*

BROOMAN.
9th September 1867.

2548. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of No. 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"A new process for producing hydrogen."—*A communication to him from abroad by Cyprien Marie Tessié du Motay and Charles Raphael Marechal, Fils., both of Metz, France.* *Letters Patent sealed.*

TOLHAUSEN.
9th September 1867.

2549. FREDERICK TOLHAUSEN, of 149, Boulevard Magenta, Paris, in the Empire of France, Patent Agent, for an invention for—"An improved process and apparatus for instantaneously disinfecting fecal and manuring matters, improving the same, and also rendering them fit for feeding domestic animals."—*A communication to him from abroad by Louis Jean Baptiste Alphonse Lemoine and Antoine Marius Turrel, two persons resident at Paris, in the Empire of France.* *Letters Patent sealed.*

CLARK.
9th September 1867.

2550. GEORGE CLARK, of No. 29, Arundel Street, Strand, in the County of Middlesex, for an invention for—"Improvements in cartridges." *Provisional protection only.*

BROWN.
9th September 1867.

2551. DARIUS CHASE BROWN, of the State of Massachusetts, of the United States of America, for an invention for—"Certain new and useful improvements having reference to wire heddles for loom harness, and particularly the construction, manufacture and support of such."—*Partly the result of a communication made to him by John Ashworth, a person resident at Andover, in the County of Essex and State aforesaid, and partly of his own invention.* *Complete specification; Letters Patent sealed.*

MARSDEN.
9th September 1867.

2552. JOHN MARSDEN, of Halifax, in the County of York, Mechanic, for an invention for—"Improvements in looms for weaving Scotch or ingrain carpets." *Letters Patent sealed.*

EICHHORN.
9th September 1867.

2553. JACOB EICHHORN, of 7, Delahay Street, Westminster, for an invention for—"Improvements in furnaces for melting iron and other metals, and for smelting ores."—*The result partly of a communication made to him from abroad by Heinrich Krigar, a person resident at Hanover, in the Kingdom of Prussia, and partly of invention made by himself.* *Letters Patent sealed.*

TURNOCK.
9th September 1867.

2554. JAMES TURNOCK, of Ross, in the County of Hereford, Brewer, for an invention for—"Improvements in cask stands." *Letters Patent sealed.*

MEDHURST.
9th September 1867.

2555. JOHN MEDHURST, of 14, Drummond Road, Bermondsey, in the County of Surrey, for an invention for—"Improvements in fitting ships' rudders." *Letters Patent sealed.*

JORDAN.
10th September 1867.

2556. JOHN JORDAN, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in the construction of stuffing-boxes, slide valves and steam jacketings." *Provisional protection only.*

SPENCER.
WARE.
10th September 1867.

2557. CHARLES JAMES SPENCER, of 4, Queen Street Place, in the City of London, Engineer, and FREDERICK WARE, of 11, Maud Terrace, Stratford, in the County of Essex, Boiler Maker, for an invention for—"Improvements in steam-boilers." *Provisional protection only.*

DICKEN.
10th September 1867.

2558. JOSEPH DICKEN, of Llanddulas, in the County of Denbigh, Platelayer, for an invention for—"An improved yielding fishplate employed upon railways." *Provisional protection only.*

BROWN.
10th September 1867.

2559. JOHN HARCOURT BROWN, of Abbey Mills, Romsey, in the County of Hampshire, for an invention for—"The production and manufacture of compressed leather and articles of leather." *Letters Patent sealed.*

HOLLIDAY.
10th September 1867.

2560. JOHN HOLLIDAY, of the firm of Pitman, Walcot and Holliday, of No. 5, Wells Street, Falcon Square, in the City of London, for an invention for—"Improvements in fringes." *Provisional protection only.*

BROOMAN.
10th September 1867.

2561. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"An improved thermometer."—*A communication to him from abroad by César Auguste Deverte, of Paris, France.* *Provisional protection only.*

EICHHORN.
10th September 1867.

2562. JACOB EICHHORN, of 7, Delahay Street, Westminster, for an invention for—"Improvements in steam-boiler and other furnaces."—*A communication to him from abroad by Heinrich Krigar and Wilhelm Grote, persons resident in Hanover, in the Kingdom of Prussia.* *Provisional protection only.*

SUTTON.
10th September 1867.

2563. CHARLES SUTTON, of 108, Holloway Road, in the County of Middlesex, for an invention for—"Improvements in optical apparatus designed to demonstrate the persistence of vision." *Provisional protection only.*

RAE.
10th September 1867.

2564. JAMES RAE, of Lower Sydenham, in the County of Kent, Engineer, for an invention for—"Improvements in portable apparatus for cleansing and filtering water for army and other purposes." *Letters Patent sealed.*

WHITTOME.
10th September 1867.

2565. JAMES WHITTOME, of Walworth, in the County of Surrey, Engineer, for an invention for—"Improvements in baling presses for pressing cotton and other substances." *Letters Patent sealed.*

KINTON.
10th September 1867.

2566. AARON KINTON, of Road, near Bath, in the County of Somerset, for an invention for—"Improvements in the construction of water wheels." *Provisional protection only.*

POTTLE.
10th September 1867.

2567. JOHN POTTLE, of Little Bealings, in the County of Suffolk, for an invention for—"A new or improved cucumber box." *Letters Patent sealed.*

MATHER.
11th September 1867.

2568. COLIN MATHER, of the Salford Iron Works, Manchester, for an invention for—"Improvements in machinery for washing ores, grain, wool and other mineral, vegetable and animal substances." *Letters Patent sealed.*

DUTTON.
MASON.
11th September 1867.

2569. EDWARD KENWORTHY DUTTON, of Manchester, in the County of Lancaster, Consulting Engineer, and SAM. MASON, junior, of the same place, Machinery Agent, for an invention for—"Improvements in the bearings of 'hydro-extractors,' and in the method of supplying lubricating matter to the same, applicable also to the lubricating of the bearings of other machinery." *Provisional protection only.*

BROWN.
11th September 1867.

2570. SYDNEY BROWN, of No. 5, Blackfriars Road, in the County of Surrey, Perfumer, for an invention for—"An improvement in the method of ornamenting bottles, vases and jars used for perfume or toilet purposes." *Provisional protection only.*

BAKER.
11th September 1867.

2571. WILLIAM BAKER, of Tipton, in the County of Stafford, Puddler and Ball Furnace Man, for an invention for—"Improvements in the manufacture of iron and in furnaces used in the manufacture of iron." *Provisional protection only.*

CLARK.
11th September 1867.

2572. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in machinery for polishing, grinding and edging slabs of marble, slate and other minerals."—*A communication to him from abroad by Stinson Hagaman, of Weisport, Carbon County, State of Pennsylvania, United States of America.* *Letters Patent sealed.*

BAIRD. 11th September 1867.

2573. WILLIAM BAIRD, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improved apparatus to be used for registering the number of passengers entering vehicles." *Provisional protection only.*

WEINTRAUD. 11th September 1867.

2574. FRITZ WEINTRAUD, of Aldermanbury, in the City of London, and of the firm of Christian Weintraud, junior, of Offenbach, Hesse Darmstadt, for an invention for—"Improvements in purses and other like articles."—*A communication to him from abroad by Franz Weintraud, of Offenbach, Hesse Darmstadt.* *Provisional protection only.*

DAVIES. 11th September 1867.

2575. JOSEPH DAVIES, of Bowdon, in the County of Chester, Salt Proprietor, for an invention for—"Improvements in apparatus used in the manufacture of salt." *Letters Patent sealed.*

PREWITT. 11th September 1867.

2576. LAURA MARY PREWITT, of the City and County of Bristol, Stay Manufacturer, for an invention for—"Improvements in stays, bodices or corsets." *Provisional protection only.*

LÜCKES. 11th September 1867.

2577. HENRY RICHARDS LÜCKES, of Coleford, in the County of Gloucester, Gentleman, for an invention for—"The manufacture of artificial or compressed fuel in the treatment of coal, peat, charcoal, tan, sawdust and woody fibre, whereby those substances either together or separately, can be utilized when in a state of powder or minute division, and converted into a serviceable fuel." *Provisional protection only.*

NEWTON. 11th September 1867.

2578. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in anvils"—*A communication to him from abroad by James Ezekiel Emerson, of Trenton, State of New Jersey, United States of America.* *Letters Patent sealed.*

NEWTON. 11th September 1867.

2579. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in saws." — *A communication to him from abroad by James Ezekiel Emerson, of Trenton, State of New Jersey, United States of America.* *Letters Patent sealed.*

COOKE. 11th September 1867.

2580. WILLIAM FOTHERGILL COOKE, of Aberia, near Carnarvon, North Wales, for an invention for—"Improvements in tunnelling and quarrying slate and other minerals, and in machinery used for these purposes." *Letters Patent sealed.*

MELDRUM. 12th September 1867.

2581. JOHN BALFOUR MELDRUM, of New Jersey, United States of America, but at present residing at Dundee, in the County of Forfar, North Britain, for an invention for —"Improvements in printing textile fabrics." *Letters Patent sealed.*

STEWART. 12th September 1867.

2582. HUGH STEWART, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in driving the saw-blade cutters of reaping machines." *Letters Patent sealed ; no specification filed.*

WILDERSPIN. 12th September 1867.

2583. JAMES WILDERSPIN, of Elsworth, in the County of Cambridge, Agricultural Implement Manufacturer, for an invention for—"Improvements in the construction of horse rakes." *Letters Patent sealed.*

PERRIN. 12th September 1867.

2584. JAMES PERRIN, of Hyde, in the County of Chester, Engineer, for an invention for—"An improved fuel economizer." *Letters Patent sealed ; no specification filed.*

HALFPENNY. 12th September 1867.

2585. JOHN WILLIAM HALFPENNY, of Aldersgate Street, in the City of London, Importer, for an invention for—"Improvements in tobacco pipes." *Provisional protection only.*

OATES. 12th September 1867.

2586. CHRISTOPHER OATES, of Stourbridge, in the County of Worcester, Land Agent, for an invention for—"Improvements in fire-escapes and ladders." *Provisional protection only.*

COOPER. 12th September 1867.

2587. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for —"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

BROWN. 12th September 1867.

2588. WILLIAM BROWN, of Smethwick, in the County of Stafford, Iron Master, for an invention for—"Improvements in machinery for rolling hoops, strips, angle bars and other bars of iron and steel." *Letters Patent sealed.*

SYMONS.
13th September 1867.

2589. HERMON SYMONS, of Dulwich, in the County of Surrey, Hardware Agent and Manufacturer, for an invention for—"Improvements in fire guards and fire screens." *Provisional protection only.*

COUCHOUD.
13th September 1867.

2590. PIERRE RAYMOND COUCHOUD, of No. 71, Rue de Rambuteau, Paris, in the Empire of France, for an invention for—"Improvements in machinery for manufacturing chenille." *Letters Patent sealed.*

REID.
13th September 1867.

2591. JAMES REID, of the firm of Neilson and Company, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in apparatus for finishing parts of locomotive wheels." *Letters Patent sealed.*

PAGET.
13th September 1867.

2592. FREDERICK ARTHUR PAGET, of 1, Seymour Chambers, York Buildings, Adelphi, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in preventing the deviation of the compasses of iron or steel ships." *Provisional protection only.*

BATHO.
13th September 1867.

2593. WILLIAM FOTHERGILL BATHO, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in apparatus for heating, evaporating and cooling liquids." *Letters Patent sealed.*

LOWE.
TAYLOR.
13th September 1867.

2594. RICHARD LOWE, of Birmingham, in the County of Warwick, Jeweller, and JOHN TAYLOR, of Birmingham aforesaid, Jeweller, for an invention for—"Improvements in the manufacture of articles of jewellery." *Letters Patent sealed.*

NAPIER.
13th September 1867.

2595. JAMES MURDOCH NAPIER, of York Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in wine glasses and in stands or holders for the same." *Letters Patent sealed.*

DALTON.
13th September 1867.

2596. SAMUEL DALTON, of Chester, for an invention for—"Improvements in the manufacture of iron and steel, and in furnaces therefor." *Letters Patent sealed.*

WHITEHEAD.
13th September 1867.

2597. WILLIAM WHITEHEAD, of Dartford Print Works, Dartford, in the County of Kent, for an invention for—"Improvements in printing fabrics or in producing patterns thereon." *Letters Patent sealed.*

BONNEVILLE.
14th September 1867.

2598. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved railway brake."—*A communication from Leleux Bernard, a person resident at St. Ghislain, in the Kingdom of Belgium.* *Letters Patent sealed.*

BROWNSON.
14th September 1867.

2599. WALTER GALE BROWNSON, of Wellsville, in the State of Ohio and United States of America, Electrician, for an invention for—"Improvements in telegraphic apparatus relating especially to telegraphic 'relays,' 'repeaters' and 'commutators.'" *Letters Patent sealed; specification filed by order.*

NEWTON.
14th September 1867.

2600. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"A mode of increasing the efficiency of steam for motive-power purposes."—*A communication to him from abroad by John Blake Tarr, of Chicago, State of Illinois, United States of America.* *Letters Patent sealed.*

ANTILL.
GRIMES.
TUNKS.
14th September 1867.

2601. JOSHUA ANTILL, of York Road, Wandsworth, GEORGE GRIMES, Commercial Road, Lambeth, both in the County of Surrey, Plasterers, HENRY CHARLES TUNKS, Christchurch Street, Chelsea, County of Middlesex, Modeller, for an invention for—"Improvements in the construction of cores used in casting metallic pipes or tubes of a curved or cyphon form." *Provisional protection only.*

BORDIN.
14th September 1867.

2602. HORTENSE ANASTASIE BORDIN, of Paris, in the Empire of France, Widow, for an invention for—"An improved means and apparatus for preventing sea sickness." *Letters Patent sealed.*

CANHAM.
14th September 1867.

2603. RICHARD CANHAM, of Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in means or apparatus for sharpening knives and other edged articles, which improvements are also applicable to grinding and polishing various surfaces." *Letters Patent sealed.*

JEYES.
14th September 1867.

2604. JOHN JEYES, of Stanley Road, Upper Holloway, in the County of Middlesex, for an invention for—"A new or improved material to be used as a substitute for oiled silk, bladders, gut-strings, india-rubber, and other waterproof materials and leather." *Letters Patent sealed.*

CRAUSE. 16th September 1867.

2605. PERCY CRAUSE, of 33, Dorset Place, Dorset Square, in the County of Middlesex, Gentleman, for an invention for—"Improvements in propelling boats, ships and other vessels." *Provisional protection only.*

PICKIN. 16th September 1867.

2606. GEORGE PICKIN, of Birmingham, in the County of Warwick, Lamp Manufacturer, for an invention for—"Improvements in the treatment and preparation of mineral oils and spirits for illuminating and other purposes."—*Partly a communication to him from abroad by Henry Chadburn, of St. Louis, State of Missouri, United States of America, and partly an invention and discovery made by himself.* *Letters Patent sealed.*

MCKEAN. 16th September 1867.

2607. JAMES ASBURY MCKEAN, of No. 3, Rue Scribe, Paris, in the Empire of France, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in machinery or apparatus for cutting or working rocks and other hard substances, chiefly designed for mining, tunnelling and other like operations."—*A communication to him from abroad by Herman Haupt, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

DUMONT. 16th September 1867.

2608. PHILIBERT DUMONT, of No. 14, Coronation Place, Stoke Newington Road, in the County of Middlesex, Merchant, for an invention for—"An improved manufacture of soap."—*A communication to him from abroad by Achille Louis Sabather, Alfred Bizet and Louis François Joseph Lecat, both of No.* 11, *Place Saint Jacques, Compiègne, in the Empire of France.* *Provisional protection only.*

BRADBURY. CHADWICK. 16th September 1867.

2609. GEORGE FRANCIS BRADBURY, and THOMAS CHADWICK, of the firm "Bradbury and Co.," Oldham, in the County of Lancaster, Sewing-Machine Manufacturers, for an invention for—"Improvements in or applicable to sewing-machines." *Letters Patent sealed.*

CUNNINGHAM. 16th September 1867.

2610. WILLIAM JOHN CUNNINGHAM, of New Oxford Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in means or apparatus to be employed to sewing-machines, and to other machines wherein cams or cam surfaces are employed working in connection with trucks or rollers, by means of which they are in working rendered comparatively noiseless." *Letters Patent sealed.*

HOLSTE. 17th September 1867.

2611. CARL HOLSTE, Civil Engineer, of 12, Henrietta Street, Covent Garden, in the County of Middlesex, for an invention for—"Improvements in blast furnaces."—*A communication to him from abroad by Frederick Lürmann, in Oesede, near Osnabrück, in the Kingdom of Prussia.* *Letters Patent sealed.*

LE DUC. 17th September 1867.

2612. WILLIAM LE DUC, of Saint Helier's, in the Island of Jersey, Slater, for an invention for—"Improvements in the mode of covering roofs with slate or other materials, which improvements are applicable also to the covering or forming of walls." *Letters Patent sealed.*

BRAILSFORD. GADSBY. 17th September 1867.

2613. WILLIAM BRAILSFORD, and JOSEPH GADSBY, both of the Town and County of the Town of Nottingham, Draughtsmen, for an invention for—"Improvements in the manufacture or production of lace made on bobbin net or twist lace machines." *Letters Patent sealed.*

BAYLEY. CAMPBELL. 17th September 1867.

2614. JOHN CLOWES BAYLEY, and DANIEL CAMPBELL, of 10, John Street, Adelphi, in the County of Middlesex, Engineers, for an invention for—"Improvements in fire lighters and fire revivers." *Provisional protection only.*

TURNER. 17th September 1867.

2615. THOMAS TURNER, of the City of Bristol, Schoolmaster, for an invention for—"Improvements in mounts or holders for maps, tablets, prints, blinds and similar articles." *Letters Patent sealed.*

JAY. 17th September 1867.

2616. SAMUEL JAY, of Kentish Town, in the County of Middlesex, for an invention for—"A new or improved apparatus for adjusting or securing scarfs, neckties and other articles of apparel." *Provisional protection only.*

AMESBURY. 17th September 1867.

2617. SAMUEL CORNWALLIS AMESBURY, M.R.C.S., F.R.C.S., L.R.C.P., Surgeon in Her Majesty's Indian Army, now residing at 6, St. Aubyn's Place, Clifton Villa, Hove, Brighton, in the County of Sussex, for an invention for—"Improvements in apparatus for communicating between passengers and guards of railway trains, and between guards and engine drivers of railway trains." *Provisional protection only.*

BELL.
17th September 1867.

2618. THOMAS BELL, of Hampstead, in the County of Middlesex, for an invention for—"Improvements in treating the oxide of iron residues of gas purifying in order principally to extract sulphur therefrom." *Provisional protection only.*

GARDNER.
17th September 1867.

2619. DANIEL GARDNER, of the firm of Messieurs A. Gardner and Son, of the City of Glasgow, in the County of Lanark, North Britain, Cabinet Makers and Upholsterers, for an invention for—"Improvements in spring mattresses, sofas, couches and chairs." *Provisional protection only.*

STEVENSON.
17th September 1867.

2620. THOMAS STEVENSON, of Wharf Road, City Road, in the County of Middlesex, Firewood Manufacturer, for an invention for—"Improvements in the manufacture of faggots or fire lighters." *Provisional protection only.*

CLARK.
17th September 1867.

2621. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in valve closet apparatus, part of which is applicable for regulating the flow of water in other cases."—*A communication to him from abroad by François Tacon, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

VARLEY.
8th September 1867.

2622. FREDERICK HENRY VARLEY, of 337, Kentish Town Road, in the County of Middlesex, for an invention for—"Improvements in apparatus for testing telegraph conductors, part of the invention being applicable to other purposes." *Letters Patent sealed.*

BURDON.
18th September 1867.

2623. WILLIAM WHARTON BURDON, of the Town and County of the Town of Newcastle-upon-Tyne, Esquire, for an invention for—"A new or improved process of bleaching vegetable fibre." *Letters Patent sealed.*

LITSTER.
STOREY.
18th September 1867.

2624. CHARLES LITSTER, and GEORGE STOREY, both of Manchester, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

ADAMS.
PARSON.
18th September 1867.

2625. THOMAS ADAMS, Engineer, and GEORGE JOHN PARSON, Gentleman, both of No. 5, Duke Street, Adelphi, in the County of Middlesex, for an invention for—"Improvements in and applicable to slide valves." *Letters Patent sealed.*

SOAMES.
18th September 1867.

2626. JAMES SOAMES, of the Thames Soap Works, Greenwich, for an invention for—"An improved candle fixer." *Provisional protection only.*

WILKINSON.
18th September 1867.

2627. THOMAS BORRETT WILKINSON, of 28, Friars Street, Ipswich, in the County of Suffolk, Engineer and General Machinist, for an invention for—"Improvements in apparatus for crushing beans, oats and other grain or seed." *Provisional protection only.*

MELLOR.
18th September 1867.

2628. HENRY MOSES MELLOR, of the firm of Moses Mellor and Sons, Arkwright Street, Nottingham, for an invention for—"Improvements in circular knitting frames." *Letters Patent sealed.*

WATSON.
19th September 1867.

2629. RICHARD WATSON, of Liverpool, in the County of Lancaster, Fire Proof Safe Manufacturer, for an invention for—"Improvements in apparatus for distributing gas for heating and lighting." *Provisional protection only.*

CLARKSON.
19th September 1867.

2630. THOMAS CHARLES CLARKSON, Manufacturer, of 56, Stamford Street, Blackfriars Road, in the County of Surrey, for an invention for—"Improvements in the method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes." *Letters Patent sealed and specification filed by order.*

PORTER.
19th September 1867.

2631. PHILIP PORTER, of 83, Fleet Street, London, Manager for Lloyd's Maps, for an invention for—"An improved map, blind, scene and picture roller." *Provisional protection only.*

RUST.
19th September 1867.

2632. JESSE RUST, of Lambeth, in the County of Surrey, for an invention for —"A new or improved material for decorative purposes." *Letters Patent sealed.*

MURPHY.
19th September 1867.

2633. WILLIAM JEREMIAH MURPHY, of Cork, in the County of the City of Cork, Ireland, for an invention for—"Improvements in the method of and apparatus for obtaining and applying motive-power." *Provisional protection only.*

HUGGINS.
19th September 1867.

2634. JOHN HUGGINS, Photographer, 5, Davey Place, Norwich, Norfolk England, for an invention for—"A polarizing kaleidoscope." *Provisional protection only*

MOLINEAUX. 19th September 1867.

2635. WILLIAM MOLINEAUX, of Wolverhampton, in the County of Stafford, Roll Turner, for an invention for—"Improvements in machinery for rolling bars, rods and plates of iron and steel and other metals, of varying thicknesses or of irregular figures." *Provisional protection only.*

BLETCHER. 19th September 1867.

2636. THOMAS BLETCHER, of Peterboro', Canada, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Engineer, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

WILLANS. 19th September 1867.

2637. JACOB GEOGHEGAN WILLANS, of 9, St. Stephen's Crescent, Bayswater, in the County of Middlesex, for an invention for—"Improvements in the manufacture of iron." *Letters Patent sealed.*

FISHER. 19th September 1867.

2638. HENRY FISHER, of Birkenhead, in the County of Chester, for an invention for—"Improvements applicable to steam-boiler and other furnaces." *Provisional protection only.*

SAMS. 19th September 1867.

2639. JOSEPH HENRY SAMS, of the firm of Ben Reid and Co., Agricultural Implement Makers, Bon Accord Works, Justice Mill Lane, Aberdeen, for an invention for—"Improvements in drill sowing-machines, in horse rakes and in horse hoes." *Letters Patent sealed.*

GIBSON. 20th September 1867.

2640. WILLIAM WALKER GIBSON, of Edinburgh, in the County of Mid Lothian, North Britain, for an invention for—"Improvements in decorticating and cleaning cereals, and in the machinery or apparatus employed therefor." *Letters Patent sealed.*

POTTS. 20th September 1867.

2641. WILLIAM POTTS, of Handsworth, in the County of Stafford, Manufacturer, for an invention for—"Improvements in apparatus for ventilating rooms and buildings." *Letters Patent sealed.*

HARRISON. HARRISON. 20th September 1867.

2642. JOSEPH JOHN HARRISON, of Great Clowes Street, Lower Broughton, in the County of Lancaster, Engineer, and EDWARD HARRISON, of Lower Broughton, in the County of Lancaster, Gentleman, for an invention for—"Improvements in carding-engines." *Provisional protection only.*

LENZBERG. 20th September 1867.

2643. LOUIS LENZBERG, of Oxford Street, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in gas lamps and burners for the same." *Letters Patent sealed.*

CLARK. 20th September 1867.

2644. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the means of tinting or coloring artificial flowers and foliage."—*A communication to him from abroad by Octave Eugéne Fillion, Artificial Flower Manufacturer, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

GUYON. 20th September 1867.

2645. FRANCISQUE THEODORE MARIE ANGE GUYON, of Saint Brieux, Department of Côtes du Nord, Empire of France, Pressman, for an invention for—"A new or improved typographic-forme fixing apparatus." *Letters Patent sealed.*

MCDERMOTT. 20th September 1867.

2646. CHARLES MCDERMOTT, Gentleman, of No. 2, Carlton Villas, Wiltshire Road, Brixton, Surrey, for an invention for—"An improved spunge for cleaning slates and similar articles." *Provisional protection only.*

MCDERMOTT. 20th September 1867.

2647. CHARLES MCDERMOTT, Gentleman, of No. 2, Carlton Villas, Wiltshire Road, Brixton, Surrey, for an invention for—"An improved metallic seal for envelopes."—*A communication to him from abroad by Ralph Jennings, of No. 80, Chambers Street, New York, United States of America.* *Provisional protection only.*

TONGUE. 20th September 1867.

2648. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the preparation of oils for illuminating or other purposes, and in the arrangement or construction of the lamps employed for burning the same."—*A communication to him from abroad by Carl Wilhelm Herbst, Commission Agent, of Paris, in the Empire of France.* *Provisional protection only.*

RAFFAULT. 20th September 1867.

2649. RENÉ RAFFAULT, of Paris, France, Gentleman, for an invention for—"An improved petticoat." *Letters Patent sealed.*

DREYFOUS.
20th September 1867.

2650. SAMUEL DREYFOUS, of No. 32, Rue de Bondy, Paris, France, Civil Engineer, for an invention for—"Improvements in bread ovens and in their combination with various apparatus for the manufacture of bread."—*A communication to him from abroad by Messrs. Thomas Caruso and Joseph Augustin Garau, of Paris, France.*
Letters Patent sealed.

NEWBY.
20th September 1867.

2651. EDWIN HENRY NEWBY, of No. 39A, King William Street, in the City of London, Civil Engineer, for an invention for—"An improved alarm apparatus."
Provisional protection only.

HALL.
20th September 1867.

2652. WILLIAM HALL, of Salford, in the County of Lancaster, Gentleman, for an invention for—"Improvements in separating yeast from liquid matters and in apparatus to be used therefor." *Letters Patent sealed; no specification filed.*

NEWTON.
20th September 1867.

2653. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in whips and whip holders."—*A communication to him from abroad by John Gibson, junior, of Albany, in the State of New York, United States of America.*
Letters Patent sealed.

GREEN.
GREEN.
21st September 1867.

2654. CHARLES EDMOND GREEN, of 13, Blandford Street, Portman Square, in the County of Middlesex, and JOHN GREEN, of Windermere Cottage, Winchmore Hill, Edmonton, in the said County of Middlesex, for an invention for—"A new or improved cartridge for breech-loading fire-arms." *Provisional protection only.*

CRAUSE.
21st September 1867.

2655. PERCY CRAUSE, of 33, Dorset Place, Dorset Square, in the County of Middlesex, Gentleman, for an invention for—"Improvements in ventilators for hats and other coverings for the head." *Provisional protection only.*

MARCHISIO.
21st September 1867.

2656. GIACOMO EDUARDO MARCHISIO, of Baker Street, Portman Square, in the County of Middlesex, Doctor of Medicine and Practical Chemist, for an invention for—"Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions." *Letters Patent sealed.*

HARGREAVES.
21st September 1867.

2657. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in the manufacture of iron." *Letters Patent sealed.*

HOWARD.
21st September 1867.

2658. DAVID HOWARD, of Dobcross, in the County of York, for an invention for—"Certain improvements in the manufacture of fabrics termed 'Union flannels,' and in other similar 'Union' fabrics." *Provisional protection only.*

WILLIAMSON.
21st September 1867.

2659. JOHN STONEHOUSE WILLIAMSON, of Long Hill, near West Hartlepool, in the County of Durham, Farmer, for an invention for—"An improved method of and apparatus for drying, cleaning and separating grain."
Provisional protection only.

DICKINS.
HEYWOOD.
21st September 1867.

2660. ALBERT LUNGLEY DICKINS, and HARVEY HEYWOOD, of Middleton, in the County of Lancaster, Dyers and Printers, for an invention for—"Improvements in printing yarns or threads and in apparatus to be used therefor."
Provisional protection only.

LEE.
21st September 1867.

2661. DAVID THORPE LEE, of Birmingham, in the County of Warwick, Gentleman, for an invention for—"Improvements in the amalgamation or combination of animal with vegetable food." *Provisional protection only.*

BLACKBURN.
BLACKBURN.
21st September 1867.

2662. BEWICKE BLACKBURN, and ALEXANDER BEWICKE BLACKBURN, of Hans Place, Chelsea, in the County of Middlesex, for an invention for—"Improvements in lucifer matches or tapers and in the apparatus for holding and igniting the same." *Letters Patent sealed.*

MEIKLEJON.
21st September 1867.

2663. JOHN MEIKLEJON, of Dalkeith, in the County of Mid Lothian, North Britain, for an invention for—"Improvements in machinery or apparatus for lifting, lowering and transporting heavy bodies." *Provisional protection only.*

BAIRD.
21st September 1867.

2664. JAMES BAIRD, of Croy, in the County of Dumbarton, North Britain, Manufacturing Chemist, for an invention for—"Improvements in the treatment of jute and in oils or preparations for softening the fibres thereof."
Letters Patent sealed.

MACKENZIE.
ROBINSON.
21st September 1867.

2665. ANGUS MACKENZIE, of Capel Street, Dublin, Plumber, and SAMUEL ROBINSON, of Brunswick St., Dublin, Foreman Builder, for an invention for—"Improvements in apparatus to be applied to cisterns for preventing waste of water."
Letters Patent sealed.

SPILL.
21st September 1867.

2666. DANIEL SPILL, of No. 15, Hackney Terrace, South Hackney, in the County of Middlesex, Manufacturer, for an invention for —"Improvements in the treatment of xyloidine." *Provisional protection only.*

MUIR.
21st September 1867.

2667. THOMAS MUIR, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in washing rollers and blankets used by printers, and in the machinery or apparatus employed therefor."
Letters Patent sealed.

AITCHISON.
GRANTHAM.
21st September 1867.

2668. ADAM AITCHISON, of Wilton Terrace, Peckham, Gas Engineer, and HENRY JOHN GRANTHAM, of Dock Head, Bermondsey, both in the County of Surrey, for an invention for—"Improvements in the production of carburetted gas and in the apparatus and burner applicable thereto." *Letters Patent sealed.*

RIVES.
21st September 1867.

2669. JACQUES RIVÈS, of 13, Rue de Nemours, Paris, in the Empire of France, for an invention for—"Improvements in the manufacture of metallic pens."
Letters Patent sealed.

LISTER.
21st September 1867.

2670. SAMUEL CUNLIFFE LISTER, of Manningham, in the County of York, for an invention for —"Improvements in furnaces." *Provisional protection only.*

KENDRICK.
21st September 1867.

2671. THOMAS KENDRICK, of Wednesbury, in the County of Stafford, Coach Smith, for an invention for—"Improvements in self-acting folding carriage steps."
Provisional protection only.

COOPER.
21st September 1867.

2672. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in fire-arms."
Letters Patent sealed.

MACGEORGE.
23rd September 1867.

2673. GEORGE WALTER MACGEORGE, of Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in pipes for smoking."
Letters Patent sealed.

RITCHIE.
23rd September 1867.

2674. CHARLES RITCHIE, of Brixton, in the County of Surrey, Gentleman, for an invention for—"Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion." *Letters Patent sealed.*

GRIFFIN.
GREEN.
23rd September 1867.

2675. JOHN GRIFFIN, of St. Ann's Road, in the County of Surrey, and FRANK GREEN, of Watling Street, in the City of London, for an invention for —"Improved machinery or apparatus to be used in the manufacture of envelopes."
Provisional protection only.

FLETCHER.
23rd September 1867.

2676. JAMES FLETCHER the younger, of the firm of William Collier and Company, of Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam or other power hammers." *Provisional protection only.*

COOKE.
23rd September 1867.

2677. WILLIAM COOKE, of 24, Jermyn Street, Saint James's, in the County of Middlesex, for an invention for—"Improvements in apparatus for the regulation of up and down currents of air in shafts or chimneys." *Provisional protection only.*

HARGREAVES.
23rd September 1867.

2678. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in separating pyrites, shale and other impurities from coal." *Provisional protection only.*

BEARDMORE.
BROCK.
KIRK.
23rd September 1867.

2679. WILLIAM BEARDMORE, WALTER BROCK, and ALEXANDER CARNEGIE KIRK, all of Glasgow, in the County of Lanark, North Britain, Engineers, for an invention for—"Improvements relating to furnaces." *Provisional protection only.*

BLAIR.
23rd September 1867.

2680. JAMES BLAIR, of Glasgow, in the County of Lanark, North Britain, Chemist, for an invention for—"Improvements in revivifying animal charcoal."
Provisional protection only.

WAPPENSTEIN. LAIDLAW. 23rd September 1867.

2681. RUDOLPH WAPPENSTEIN, and ALEXANDER LAIDLAW, of 3, Bury Court, St. Mary Axe, in the City of London, for an invention for—"Improvements in envelopes." *Povisional protection only.*

BODMER. 23rd September 1867.

2682. LOUIS RUDOLPH BODMER, of 2, Lansdowne Road, Notting Hill, in the County of Middlesex, Engineer, for an invention for—"Improvements in the construction of air cylinders of blast engines and in the valve arrangements for the same."—*A communication to him from abroad by Franz Stichler, of Vienna, in the Empire of Austria, Civil Engineer.* *Provisional protection only.*

CLARK. 23rd September 1867.

2683. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in boots and shoes."—*A communication to him from abroad by Louis Auguste Favre, Watch Maker, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

BEVAN. 23rd September 1867.

2684. SANDERS BEVAN, of 53, Cumming Street, Pentonville, in the County of Middlesex, for an invention for—'Improvements in apparatus for ventilating underground railways and other like structures." *Provisional protection only.*

ZIEGELE. 23rd September 1867.

2685. AUGUSTUS ZIEGELE, of 11, Mincing Lane, in the City of London, for an invention for—"Improvements in the manufacture of Epsom salts."—*A communication to him from abroad by Messrs. Vorster and Grüneberg, persons resident at Cologne, in the Kingdom of Prussia.* *Letters Patent sealed.*

FORBES. 24th September 1867.

2686. HUGH FORBES, of 184, Euston Road, N.W., Parish of St. Pancras, County of Middlesex, for an invention for—"Improvements in the construction of rotary pumps." *Letters Patent sealed.*

WINTER. 24th September 1867.

2687. WILLIAM WINTER, of Leeds, in the County of York, Sewing-Machine Maker, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

BATCHELDOR. 24th September 1867.

2688. GEORGE BATCHELDOR, of Liverpool, in the County of Lancaster, Cement Manufacturer, for an invention for—"Improvements in trough waterclosets." *Letters Patent sealed.*

LEWIS. HUNTINGTON. ANYON. 24th September 1867.

2689. JOHN LEWIS, of Preston, in the County of Lancaster, Engineer, WILLIAM HUNTINGTON, of the same place, Cotton Manufacturer, and WILLIAM ANYON, junior, of the same place, Commission Agent, for an invention for—"Improvements in moveable fire-bars." *Provisional protection only.*

BROWN. 24th September 1867.

2690. JOHN HARCOURT BROWN, of Abbey Mills, Romsey, in the County of Hants, Gentleman, for an invention for—"Improvements in the manufacture of paper and articles of paper." *Letters Patent sealed.*

COLOMB. BOLTON. 24th September 1867.

2691. PHILIP HOWARD COLOMB, of Harrow, in the County of Middlesex, Commander in the Royal Navy, and FRANCIS JOHN BOLTON, of Rochester, in the County of Kent, Captain in Her Majesty's Army, for an invention for—"Improvements in the production of light and heat for signalling and other purposes." *Letters Patent sealed.*

WILLIAMS. 24th September 1867.

2692. THOMAS HENRY WILLIAMS, of No. 20, Cecil Court, Saint Martin's Lane, in the Parish of Saint Martin, in the County of Middlesex, for an invention for—"An improvement in gas burners." *Letters Patent sealed.*

WILSON. NUTTALL. 25th September 1867.

2693. ROBERT WILSON, of the Bridgewater Foundry, Patricroft, near the City of Manchester, Engineer, and JOHN NUTTALL, of the same place, Manager, for an invention for—"Improvements in the manufacture of cranked axles, cranked shafts and other heavy forgings." *Letters Patent sealed.*

ABEL. 25th September 1867.

2694. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases."—*A communication to him from abroad by Nicolas Lebedeff, Mining Engineer, of St. Petersburg, in the Empire of Russia.* *Letters Patent sealed.*

BAYLEY. CAMPBELL. 25th September 1867.

2695. JOHN CLOWES BAYLEY, and DANIEL CAMPBELL, of 10, John Street, Adelphi, in the County of Middlesex, Engineers, for an invention for—"Improvements in projectiles and their manufacture." *Provisional protection only.*

RATCLIFF.
25th September 1867.

2696. DANIEL ROWLINSON RATCLIFF, of the firm of Thomas Milner and Son, Phœnix Safe Works, Liverpool, in the County of Lancaster, for an invention for —" Certain improvements in the manufacture of safes and other depositories."
Provisional protection only.

CRANSTON.
25th September 1867.

2697. WILLIAM MCINTYRE CRANSTON, of 77, Upper Thames Street, in the City of London, for an invention for—" Improvements in implements for digging potatoes."—*A communication to him from abroad by Clark Chase, a person resident at Portsmouth, Rhode Island, United States of America.* *Provisional protection only.*

MUSGRAVE.
25th September 1867.

2698. JAMES MUSGRAVE, of Belfast, in the County of Antrim, Ireland, for an invention for—" Improvements in stable, cowhouse and harness-room fittings, parts of which are also applicable for other purposes." *Letters Patent sealed.*

TOD.
HEATLEY.
25th September 1867.

2699. ANDREW TOD, of Glasgow, in the County of Lanark, North Britain, and JAMES HEATLEY, junr., of Alnwick, in the County of Northumberland, for an invention for—" Improvements in the manufacture of tobacco and in machinery or apparatus therefor." *Letters Patent sealed.*

CLAYTON.
MARBECK.
25th September 1867.

2700. GEORGE CLAYTON, and WILLIAM MARBECK, both of Leeds, in the County of York, for an invention for—" Improvements in water meters."
Provisional protection only.

WOODCOCK.
25th September 1867.

2701. WILLIAM WOODCOCK, of Pimlico, in the County of Middlesex, Engineer, for an invention for—" Improvements in apparatus or arrangements for warming and ventilating buildings." *Letters Patent sealed.*

WAYGOOD.
25th September 1867.

2702. RICHARD WAYGOOD, of Southwark, in the County of Surrey, for an invention for—" Improvements in machines for cleaning rice and other grain or seed." *Provisional protection only.*

ROOKER.
25th September 1867.

2703. ALFRED ROOKER, of East Street, Lamb's Conduit Street, in the County of Middlesex, Engraver, for an invention for—" Improvements in taps for beer casks and other vessels." *Letters Patent sealed.*

BOWER.
25th September 1867.

2704. JOSEPH BOWER, of Hunslet, in the County of York, Manufacturing Chemist, for an invention for—" Improvements in the manufacture of iron and steel." *Provisional protection only.*

CLARK.
25th September 1867.

2705. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—" An improved combined tuck creaser and self-guide or baster, chiefly applicable to sewing-machines."—*A communication to him from abroad by Henry William Fuller and Isaac Williams Barnum, both of New York City, United States of America.* *Provisional protection only.*

KIRK.
KIRK.
25th September 1867.

2706. JOHN KIRK, and JOHN KIRK the younger, both of The Park Side, Lenton, in the County of Nottingham, Lace Manufacturers, for an invention for—" Improvements in the manufacture or production of lace or weavings made on bobbin net or twist lace machines." *Letters Patent sealed.*

OXLEY.
26th September 1867.

2707. JAMES OXLEY, of Frome, in the County of Somerset, Brewers' Engineer, for an invention for—" Improvements in refrigerators for cooling worts and other liquids, which improvements are also applicable to condensers."
Letters Patent sealed.

SIMMONS.
26th September 1867.

2708. GEORGE HENRY JAMES SIMMONS, of 41, Stanhope Street, Hampstead Road, London, Middlesex, Clerk, for an invention for—Improvements in lamps for burning hydrocarbon and other oils." *Letters Patent sealed.*

SMYTH.
26th September 1867.

2709. JOHN ALEXANDER SMYTH, of Kingstown, near Dublin, Ireland, Ironmonger, for an invention for—" Improvements in cinder sifters."
Provisional protection only.

TAYLOR.
26th September 1867.

2710. ANDREW TAYLOR, of Paisley, in the County of Renfrew, North Britain, for an invention for—" Improvements in weaving ornamental fabrics."
Letters Patent sealed.

BENNIE.
26th September 1867.

2711. ROBERT WILSON BENNIE, of Glasgow, in the County of Lanark, North Britain, Manufacturer of Moulders' Blackening, for an invention for—" Improvements in the manufacture of moulders' blackening." *Provisional protection only.*

SYME.
26th September 1867.

2712. JAMES SYME, of 121, Fore Street, in the City of London, for an invention for—"Improvements in supporting window sashes, shutters, doors and other similar structures." *Provisional protection only.*

WOOD.
WOOD.
WOOD.
26th September 1867.

2713. JOHN WOOD, BENJAMIN WOOD, and RICHARD WOOD, of the firm of "John Wood and Company," of Sowerby Bridge, in the County of York, Engineers and Millwrights, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

MORRALL.
26th September 1867.

2714. ABEL MORRALL, of Studley, in the County of Warwick, for an invention for—"Certain improvements in the manufacture of fish-hooks." *Letters Patent sealed.*

JAMESON.
26th September 1867.

2715. JOHN JAMESON, of 10, Catherine Terrace, Gateshead, Engineer, for an invention for—"Improvements in the preparation of paper which cannot be tampered with for the removal of writing thereon, without detection." *Letters Patent sealed.*

WILKINSON.
26th September 1867.

2716. GEORGE WILKINSON, of St. Leonard's Road, Bromley, in the County of Middlesex, for an invention for—"Improvements in pumps." *Letters Patent sealed.*

HORSLEY.
HORSLEY.
26th September 1867.

2717. ERASMUS THOMAS HORSLEY, of Pye Bridge, Alfreton, in the County of Derby, Engineer, and CHARLES HORSLEY, of 22, Wharf Road, City Road, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the production of a glazed or vitrified surface on cast iron or other cast metal." *Letters Patent sealed.*

BRUNTON.
26th September 1867.

2718. JOHN BRUNTON, of 37, Kensington Park Gardens, Notting Hill, in the County of Middlesex, for an invention for—"Improvements in machinery for raising water."—*A communication to him from abroad by Robert Brunton, a person resident at Kurrachee, in the East Indies.* *Provisional protection only.*

JAMESON.
26th September 1867.

2719. JOHN JAMESON, of 10, Catherine Terrace, Gateshead, Engineer, for an invention for—"Improvements in the indication of value on cheques, bills of exchange and other documents." *Letters Patent sealed.*

NEWTON.
26th September 1867.

2720. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus applicable to turning and screw cutting."—*A communication to him from abroad by William Thomas Cole, of the City of New York, United States of America.* *Provisional protection only.*

FORDRED.
26th September 1867.

2721. JOHN FORDRED, of Blackheath, in the County of Kent, for an invention for—"Improvements in bleaching and purifying paraffin." *Provisional protection only.*

JOHNSON.
26th September 1867.

2722. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for supplying steam-boilers with water."—*A communication to him from abroad by Henry Demarest, of the City of New York, in the United States of America.* *Provisional protection only.*

VAUGHTON.
VAUGHTON.
26th September 1867.

2723. THOMAS VAUGHTON, and OLIVER VAUGHTON, of Birmingham, in the County of Warwick, trading under the style or firm of Vaughton and Sons, Jewellers, for an invention for—"An improved fastener for neck-ties or other similar articles for ladies' or gentlemen's use." *Provisional protection only.*

ANDREW.
27th September 1867.

2724. JAMES EDWARD HYDE ANDREW, of Pendleton, in the County of Lancaster, Machinist, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

ADAMS.
27th September 1867.

2725. ROBERT ADAMS, of Forest Hill, in the County of Surrey, Gun Maker, for an invention for—"Improvements in apparatus for extracting cartridge cases from breech-loading fire-arms." *Provisional protection only.*

SAMUELSON.
27th September 1867.

2726. MARTIN SAMUELSON, of County Buildings, Hull, in the County of Yorkshire, for an invention for—"Improvements in sewing-machines." *Provisional protection NOT granted.*

FREW.
SPEIRS.
27th September 1867.

2727. FORREST FREW, and JAMES SPEIRS, both of Glasgow, in the County of Lanark, North Britain, Manufacturers, for an invention for—"Improvements in looms for weaving ornamental fabrics such as leno and muslin curtains." *Provisional protection only.*

CLARK.
27th September 1867.

2728. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved hat-blocking machine."—*A communication to him from abroad by Julius Sheldon, of New York City, in the United States of America.* *Letters Patent sealed.*

PARR.
STRONG.
27th September 1867.

2729. SAMUEL PARR, and ALFRED STRONG, both of College Hill, Cannon Street, in the City of London, Architects and Surveyors, for an invention for—"Improvements in the construction of buildings, arches, bridges and such like structures, and in the floors of buildings and floors in other situations." *Provisional protection only.*

COCKER.
COCKER.
27th September 1867.

2730. JAMES COCKER, and FREDERICK STIVENS COCKER, both of Milner Square, Islington, in the County of Middlesex, Gentlemen, for an invention for—"Improved apparatus for transmitting signals in railway trains." *Provisional protection only.*

DE LA PEYROUSE.
27th September 1867.

2731. LEO DE LA PEYROUSE, of Somerset Street, Portman Square, in the County of Middlesex, for an invention for—"Improvements in the treatment of paraffine, fatty and resinous matters."—*A communication to him from abroad by Leon Krafft, Chemist, Rue de l'Eglise, à Neuilly, près Paris.* *Letters Patent sealed.*

BRANSCOMBE.
27th September 1867.

2732. FRANK BRANSCOMBE, of Brewer Street, Museum Street, in the County of Middlesex, for an invention for—"Improvements in means or apparatus employed in drilling, surfacing, cutting and ornamenting metal, wood and other substances." *Provisional protection only.*

HUGGETT.
HUGGETT.
27th September 1867.

2733. JOHN HUGGETT, and JOHN ALBERT HUGGETT, of 54, Terminus Road, Eastbourne, in the County of Sussex, for an invention for—"Improvements in the manufacture of horse nails and other nails, and in machinery used therein." *Letters Patent sealed.*

MEYER.
WAINWRIGHT.
27th September 1867.

2734. FREDERICK MEYER, and WILLIAM WAINWRIGHT, junior, of Paradise Street, Lambeth, for an invention for—"Improvements in the manufacture of candles and in moulds for the same." *Letters Patent sealed.*

MOLE.
28th September 1867.

2735. CHARLES MOLE, of Farringdon Road, in the City of London, Bootmaker, for an invention for—"Improvements in the preparation of soles and heels for boots and shoes." *Provisional protection only.*

BONNEVILLE.
28th September 1867.

2736. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"A new and improved process of treating skins in order to separate therefrom the hair and wool, and in the preparation of the hair for the manufacture of hats."—*A communication from Auguste Fraysse, junior, a person resident at No. 5, Rue Croix-des-Petits-Champs, in Paris aforesaid, Chemist.* *Letters Patent sealed.*

LAINE.
28th September 1867.

2737. LOUIS LAINE, of Paris, in the Empire of France, for an invention for—"An improved fan." *Provisional protection only.*

WARD.
VIRGO.
28th September 1867.

2738. ALFRED WARD, and CHARLES GEORGE VIRGO, both of Bradford, in the County of York, for an invention for—"Improvements in the preparation or treatment of linen and cotton fabrics in order to adapt them to the manufacture of certain articles of wearing apparel." *Provisional protection only.*

JOHNSON.
28th September 1867.

2739. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of railway wheels."—*A communication to him from abroad by Cornelius Kingsland, of McKeesport, in the County of Allegheny, in the United States of America.* *Letters Patent sealed.*

SOLOMON.
28th September 1867.

2740. GEORGE RODOLPH SOLOMON, junior, of Liverpool, in the County of Lancaster, for an invention for—"Improvements in apparatus for registering passengers travelling in public vehicles." *Letters Patent sealed.*

LEVER.
28th September 1867.

2741. ELLIS LEVER, of West Gorton Works, Gorton, in the County of Lancaster, for an invention for—"Improvements in lamps." *Provisional protection only.*

KILLOGG.
28th September 1867.

2742. HENRY KILLOGG, of the City and County of New Haven, State of Connecticut, United States of America, for an invention for—"Improvements in the manufacture of hats and machines for producing the same." *Provisional protection only.*

ELDER.
28th September 1867.

2743. JOHN ELDER, of Glasgow, Engineer, for an invention for—"Improvements in the construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack."
Letters Patent sealed.

HAMER.
28th September 1867.

2744. MILTON HAMER, of Manchester, in the County of Lancaster, India-rubber Manufacturer, for an invention for—"Improvements in machinery or apparatus for manufacturing india-rubber tubing." *Letters Patent sealed.*

PRIDEAUX.
28th September 1867.

2745. THOMAS PRIDEAUX, of Sheffield, in the County of York, for an invention for—"Improvements in smelting and treating iron and in blast furnaces or cupolas for such purposes." *Complete specification; Letters Patent sealed.*

SILVER.
28th September 1867.

2746. THOMAS SILVER, of the City and State of New York, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved lubricating packing."
Provisional protection only.

DOBSON.
HALLIWELL.
30th September 1867.

2747. BENJAMIN DOBSON, of the firm of Messieurs Dobson and Barlow, of Bolton, in the County of Lancaster, Machine Makers, and ROBERT HALLIWELL, of the same place, Foreman, for an invention for—"Improvements in mules for spinning and doubling." *Letters Patent sealed.*

JONES.
30th September 1867.

2748. CHARLES POWELL JONES, of Peckham, in the County of Surrey, Master Mariner, for an invention for—"A new or improved apparatus for removing adhering matters from the bottoms and sides of ships or other navigable vessels whilst at sea."
Letters Patent sealed.

WESTON.
30th September 1867.

2749. THOMAS WESTON, of Birmingham, in the County of Warwick, Tube Maker, for an invention for—"An improvement or improvements in the manufacture of ornamental metallic tubes." *Letters Patent sealed.*

DIMOCK.
30th September 1867.

2750. IRA DIMOCK, of 97, Cheapside, in the City of London, Manufacturer, for an invention for—"Improvements in apparatus to be used for boiling eggs and for like purposes." *Letters Patent sealed.*

JAMES.
HILL.
30th September 1867.

2751. WILLIAM JAMES, and WILLIAM HILL, both of Birmingham, in the County of Warwick, for an invention for—"An improved method of and apparatus for attaching and securing watch chains and similar articles to vests and other garments." *Letters Patent sealed.*

DONALD.
30th September 1867.

2752. JAMES DONALD, of the firm of George Miller and Company, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemists, for an invention for—"Improved arrangements for burning oil in furnaces." *Letters Patent sealed.*

DEWAR.
30th September 1867.

2753. JAMES DEWAR, Doctor of Medicine, residing in Kirkcaldy, in the County of Fife, in North Britain, for an invention for—"Improvements in preserving potatoes." *Letters Patent sealed.*

HONEGGER.
30th September 1867.

2754. CASPAR HONEGGER, of Rüti, Switzerland, Engineer, for an invention for—"An improved loom for weaving figured fabrics." *Provisional protection only.*

CLARK.
30th September 1867.

2755. JOHN CLARK, of Orchard Street, Paddington, in the County of Middlesex, Engineer, for an invention for—"Improvements in locomotive engines and their permanent ways." *Provisional protection only.*

ALEXANDER.
1st October 1867.

2756. EDWIN POWLEY ALEXANDER, of 47, Lincoln's Inn Fields, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of cast steel and in furnaces to be employed therein."—*A communication to him from abroad by Francis Ellershausen, of Ottawa, in the Dominion of Canada, Metallurgist.*
Letters Patent sealed.

BIRD.
1st October 1867.

2757. THOMAS BIRD, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in furnaces, fire-places and fire-bars, for the consumption of smoke and gases arising from products, and the non-consumption of fire-bars." *Provisional protection only.*

BONNEVILLE.
1st October 1867.

2758. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in machinery for spinning wool and other fibrous materials."—*A communication from Auguste Seguier, a person resident at Foix, in the Empire of France aforesaid, Manufacturer.* *Complete specification; Letters Patent sealed.*

JONES. 1st October 1867.

2759. JAMES GRAFTON JONES, of the Blaina Iron Works, near Newport, in the County of Monmouth, for an invention for—"Improvements in apparatus for hauling or winding ropes." *Letters Patent sealed.*

ALLIBON. MANBRÉ. 1st October 1867.

2760. GEORGE ALLIBON, of the City of Worcester, Engineer, and ALEXANDRE MANBRÉ, of 81, Baker Street, in the County of Middlesex, Sugar Refiner, for an invention for—"Improvements in apparatus applicable to the conversion of cereal and vegetable substances into saccharine matter, in treating and purifying saccharine substances extracted from malt, fruits and vegetables, in treating fatty matters, and in the manufacture of chemical products." *Letters Patent sealed.*

FIELD. 1st October 1867.

2761. JOHN LYON FIELD, of Kensington, in the County of Middlesex, Gentleman, for an invention for—"Improvements in candles and in moulds for moulding the same." *Letters Patent sealed.*

GREEN. 1st October 1867.

2762. GEORGE FRANCIS GREEN, Billiard Table Maker, Albion St., Leeds, in the County of York, for an invention for—"An improved combined billiard and dining or general table." *Provisional protection only.*

MITCHELL. 1st October 1867.

2763. WILLIAM MITCHELL, of Manchester, in the County of Lancaster, for an invention for—"Improvements in apparatus for sharpening the blades or knives employed in mowing and reaping machines." *Letters Patent sealed.*

GEDGE. 1st October 1867.

2764. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in match boxes."—*A communication to him from abroad by Régis de Monti, of No. 39, Fauboury St. Martin, Paris, France.* *Provisional protection only.*

FLETCHER. 1st October 1867.

2765. RAYMOND FLETCHER, of 86, Siddals Road, Derby, in the County of Derby, for an invention for—"A new or improved castor for furniture or other purposes." *Letters Patent sealed.*

CLARKE. 1st October 1867.

2766. THOMAS EDWARD CLARKE, of Apsley Cross, in the County of Somerset, Gentleman, for an invention for—"Improvements in the construction of bedsteads and mattresses." *Letters Patent sealed.*

SMITH. SMITH. 2nd October 1867.

2767. WILLIAM SMITH, and SAMUEL SMITH (trading under the firm of John and Samuel Smith), both of Low Bridge Works, Keighley, in the County of York, Machine and Tool Makers, for an invention for—"Improvements in the construction and working of back rollers, carriers and carriages in drawing, roving and spinning machinery for wool, hair, silk, flax and other fibrous substances." *Letters Patent sealed.*

TAUNTON. 2nd October 1867.

2768. RICHARD HOBBS TAUNTON, of the firm of Richard H. Taunton and Heyward, of the Star Tube Works, Birmingham, in the County of Warwick, Iron Tube Manufacturers, for an invention for—"Improvements in the manufacture of strip or sheet iron for certain purposes." *Letters Patent sealed.*

PARKES. 2nd October 1867.

2769. FRANK PARKES, of the firm of A. and F. Parkes and Company, of Birmingham, in the County of Warwick, Nail Manufacturers, for an invention for—"Improvements in the manufacture of certain descriptions of nails." *Letters Patent sealed.*

HENDERSON. 2nd October 1867.

2770. ARTHUR CHARLES HENDERSON, of No. 31, Charing Cross, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by Benoni Jones and Alexandre Rouyer, both of Paris, in the Empire of France.* *Provisional protection only.*

APPLEBY. 2nd October 1867.

2771. CHARLES JAMES APPLEBY, of Emerson St., Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in railway fastenings." *Provisional protection only.*

RITCHIE. 2nd October 1867.

2772. CHARLES RITCHIE, of Brixton, in the County of Surrey, Gentleman, for an invention for—"Improvements in mechanism or arrangements applicable to steam-boilers and their furnaces, the said mechanism or arrangements being especially applicable to those boilers and their furnaces with which gas is the combustible used." *Provisional protection only.*

NELSON. BRIGGS. 2nd October 1867.

2773. JAMES HENRY NELSON, and THOMAS BRIGGS, both of Wakefield, in the County of York, for an invention for—"Improved means of and apparatus for heating the water to be used in steam-boilers and in other vessels." *Letters Patent sealed.*

WRIGHT. 2nd October 1867.

2774. MATTHEW WRIGHT, of Bradford, in the County of York, Manufacturer, for an invention for—"An improved species of fabric." *Provisional protection only.*

RAMSDEN. WEBSTER. WALKER. 2nd October 1867.

2775. GEORGE RAMSDEN, of Dewsbury, in the County of York, Millwright, LEEMING WEBSTER, of Batley carr, Dewsbury, Millwright, and JOSEPH WALKER, of Heckmonwike, in the same County, Engineer, for an invention for—"Improvements in fulling machines." *Provisional protection only.*

JEFFERY. 2nd October 1867.

2776. FREDERICK JOHN JEFFERY, of the firm of J. and W. Jeffery and Co., of Liverpool, in the County of Lancaster, General Drapers and Cabinet Makers, for an invention for—"Improvements in urinals." *Letters Patent sealed.*

MACE. 2nd October 1867.

2777. CHARLES MACE, of 14, Green Street, Sunderland, in the County of Durham, for an invention for—"Improvements in marine steam-boilers." *Letters Patent sealed.*

HASCHKE. 2nd October 1867.

2778. HENRI HASCHKE, of Watling Street, in the City of London, Commission Agent, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Hubert Comblain, of Liége, Belgium.* *Letters Patent sealed.*

LAKE. 2nd October 1867.

2779. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in machinery for sewing boots and shoes."—*A communication to him from abroad by Augustus Destouy, Machinist, and Frederic Renaud, Engine Turner, both of the City and State of New York, United States of America.* *Letters Patent sealed.*

SPENCE. 3rd October 1867.

2780. WILLIAM SPENCE, of 8, Quality Court, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in and applicable to ovens, boilers and other apparatus in which heat is employed."—*A communication to him from abroad by Alfred Charles Joly de Marval, of Paris, in the Empire of France.* *Letters Patent sealed.*

DICK. 3rd October 1867.

2781. ROBERT DICK, of Motherwell, in the County of Lanark, North Britain, Coal Master, for an invention for—"Improvements in heating blast for smelting and other furnaces, and in the apparatus or means connected therewith." *Provisional protection only.*

POCHIN. HUNT. 3rd October 1867.

2782. HENRY DAVIS POCHIN, of Salford, in the County of Lancaster, Manufacturing Chemist, and EDWARD HUNT, of Manchester, in the said County, Chemist, for an invention for—"An improvement in the construction of furnaces, flues and vessels which are subjected to high temperatures." *Provisional protection only.*

DODGE. 3rd October 1867.

2783. GEORGE POMEROY DODGE, of No. 79, Upper Thames Street, in the City of London, India-Rubber Manufacturer, for an invention for—"Improvements in india-rubber mats." *Provisional protection only.*

GEDGE. 3rd October 1867.

2784. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"A portable laboratory specially intended for photographic excursions."—*A communication to him from abroad by Hippolyte Rochat, of 39, Faubourg St. Martin, Paris, France.* *Provisional protection only.*

CLARK. 3rd October 1867.

2785. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the treatment of cotton and other fibrous materials used in dentistry."—*A communication to him from abroad by John Alexander McClelland, of Louisville, in the State of Kentucky, United States of America.* *Provisional protection only.*

DE RICHEBOURG. 3rd October 1867.

2786. ERNEST BAUDESSON DE RICHEBOURG, of No. 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"A new and useful mode of advertising." *Provisional protection* NOT *granted.*

TOWNSEND. 3rd October 1867.

2787. GEORGE TOWNSEND, of Hunt End, Redditch, in the County of Worcester, Needle Manufacturer, for an invention for—"An improvement or improvements in the manufacture of machine needles." *Letters Patent sealed.*

MELLOR.
3rd October 1867.

2788. GEORGE MELLOR, of the City of York, Mechanical Engineer, for an invention for—"Improvements in machinery for the manufacture of nails and spikes."
Letters Patent sealed.

BECKS.
3rd October 1867.

2789. ARTHUR THOMAS BECKS, of Birmingham, in the County of Warwick, Iron Master, for an invention for—"Improvements in the utilization of Bessemer steel scrap." *Letters Patent sealed.*

SAGAR.
RICHMOND.
4th October 1867.

2790. THOMAS SAGAR, of Burnley, in the County of Lancaster, Machine Maker, and THOMAS RICHMOND, of the same place, Manufacturer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

JOHNSON.
4th October 1867.

2791. SAMUEL JOHNSON, of Crook, near Darlington, in the County of Durham, Mechanical Engineer, for an invention for—"Improvements in machinery for moulding, perforating and pressing bricks and other articles." *Letters Patent sealed.*

PINKUS.
4th October 1867.

2792. HENRY PINKUS, of No. 62, Mansfield Road, Haverstock Park, in the County of Middlesex, Civil Engineer, for an invention for—"Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable." *Letters Patent sealed.*

FORD.
4th October 1867.

2793. ALFRED FORD, of 10, Arthur Street, West, in the City of London, Gentleman, for an invention for—"An apparatus for assisting swimming."
Provisional protection only.

GUTMANN.
4th October 1867.

2794. JULIUS GUTMANN, of Berlin, in the Kingdom of Prussia, for an invention for—"Certain improvements in sewing-machines." *Letters Patent sealed.*

SMITH.
4th October 1867.

2795. WILLIAM SMITH, of the firm of E. S. Yardley and Company, of the City of Manchester, in the County of Lancaster, Railway Signal Engineers, for an invention for—"Improvements in points or switch indicators used on railways."
Provisional protection only.

OFFORD.
4th October 1867.

2796. JOSEPH OFFORD, of Wells Street, Oxford Street, in the County of Middlesex, Coach Builder, for an invention for—"Improvements in railway and other carriages and various parts of the same." *Letters Patent sealed.*

ELLIS.
4th October 1867.

2797. ROBERT ELLIS, of Kingstown, in the County of Dublin, Clerk in Holy Orders, for an invention for—"Improved apparatus for disconnecting conveyances from animals drawing the same." *Provisional protection only.*

MATHIAS.
4th October 1867.

2798. GEORGE HENRY DUNCAN MATHIAS, of East Cowes, Isle of Wight, Clerk, for an invention for—"Improvements in the construction of ships and vessels."
Provisional protection only.

JOHNSON.
4th October 1867.

2799. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery or apparatus employed in the manufacture of braid."—*A communication to him from abroad by George Rehfuss, of Philadelphia, Pennsylvania, in the United States of America.*
Letters Patent sealed.

HATTERSLEY.
4th October 1867.

2800. ROBERT HATTERSLEY, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in mechanism or apparatus for distributing printers' type ready for hand or machine composing."
Letters Patent sealed.

ANDERSON.
5th October 1867.

2801. JAMES ANDERSON, of New Buildings, in the County of Londonderry, Ireland, for an invention for—"Improvements in obtaining chlorine, sodium, potassium, phosphorus, and their compounds." *Letters Patent sealed.*

GEDGE.
5th October 1867.

2802. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved formation of wrapper or bale-cloth specially adapted for packing combed wool."—*A communication to him from abroad by Houbart-Caruel, of 39, Faubourg St Martin, Paris, France.* *Provisional protection* NOT *granted.*

MARTIN.
5th October 1867.

2803. GEORGE MARTIN, of Toadsmoor, near Stroud, in the County of Gloucester, for an invention for—"Improvements in the treatment of mixed fabrics and the extraction of wool therefrom, and in the construction of apparatus to be used for such treatment and for other purposes." *Provisional protection only.*

WILLIAMSON. 5th October 1867.

2804. JOHN STONEHOUSE WILLIAMSON, of Long Hill, West Hartlepool, in the County of Durham, Farmer, for an invention for—"An improved apparatus for drying corn, malt or other similar substances." *Provisional protection only.*

LOW. TREADWELL. 5th October 1867.

2805. WILLIAM LOW, and JOHN TREADWELL, trading under the name and firm of Low and Treadwell, of The Borough, in the County of Surrey, for an invention for—"Improvements in rivetting the soles of boots and shoes." *Letters Patent sealed.*

GILLHAM. 5th October 1867.

2806. ALFRED MORGAN GILLHAM, of Roffs Wharf, Woolwich, in the County of Kent, for an invention for—"An improved steam-engine." *Provisional protection* NOT *granted.*

BRADBURN. MARSH. 5th October 1867.

2807. ALFRED BRADBURN, of Birmingham, in the County of Warwick, Rule Manufacturer, and SAMUEL THOMAS MARSH, of the same place, Rule Maker, for an invention for—"Improvements in jointed rules." *Letters Patent sealed.*

LAKE. 5th October 1867.

2808. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in machinery for making bolts."—*A communication to him from abroad by Abram Alexander, of Pittsburgh, Pennsylvania, United States of America.* *Complete specification; Letters Patent sealed.*

WILLIAMS. 5th October 1867.

2809. LUKE WILLIAMS, of Fenchurch Street, in the City of London, for an invention for—"An improved combined lift and force pump."—*A communication to him from abroad by Stephen Matthews, of the ship Jumna, in the Port of Calcutta, India.* *Provisional protection only.*

PIDDINGTON. 5th October 1867.

2810. JOHN PIDDINGTON, Patent Agent, of 53, Gracechurch Street, in the City of London, for an invention for—"Improvements in pneumatic springs specially applicable to railway rolling stock."—*A communication to him from abroad by Joseph Dauley, Ironmaster, of Aiseaux, in the Kingdom of Belgium.* *Letters Patent sealed.*

TAYLOR. 5th October 1867.

2811. NATHANIEL FORTESCUE TAYLOR, of 8, Manby Street, Stratford, in the County of Essex, Gas Engineer, for an invention for—"Improvements in means or apparatus to be used in impregnating air and aëriform fluids or gases with hydrocarbons, and in burners used in burning the inflammable air obtained, which burners are also applicable when burning other gaseous fluids." *Letters Patent sealed.*

GOODFELLOW. 7th October 1867.

2812. JACOB GOODFELLOW, of Blackburn, in the County of Lancaster, Engineer, for an invention for—"Improvements in the slide valves of steam-engines." *Provisional protection only.*

SMITH. 7th October 1867.

2813. JOSEPH SMITH, of Keighley, in the County of York, Machine Maker, for an invention for—"Improvements in machinery or apparatus for moulding metal." *Letters Patent sealed.*

FAULDER. 7th October 1867.

2814. HENRY FAULDER, of Stockport, in the County of Lancaster, Grocer, for an invention for—"Improvements in machinery or apparatus for washing and cleaning currants and raisins or other similar fruit." *Provisional protection only.*

GALLOWAY. 7th October 1867.

2815. CHARLES JOHN GALLOWAY, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

ABEL. 7th October 1867.

2816. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"A new or improved process and apparatus for refining camphor."—*A communication to him from abroad by Charles Emile Perret, Chemist, of No. 23, Boulevard de Strasbury, Paris, in the Empire of France.* *Provisional protection only.*

FAUCHEUX. 7th October 1867.

2817. RAOUL PAUL FAUCHEUX, of Paris, in the Empire of France, but at present residing at Caversham Road, Kentish Town, in the County of Middlesex, for an invention for—"Improvements in pipes and cigar tubes." *Letters Patent sealed.*

MAYS. 7th October 1867.

2818. JONATHAN ALDOUS MAYS, of No. 2, West Street, Finsbury Circus, in the City of London, for an invention for—"Improvements in mining and other lamps, and in lamp and candle cases and holders." *Provisional protection* NOT *granted.*

SWAN.
7th October 1867.

2819. DAVID SWAN, junior, of Maryhill, in the County of Lanark, North Britain, Spelter Manufacturer, for an invention for—"Improvements in the manufacture of zinc." *Provisional protection only.*

TROTTER.
7th October 1867.

2820. HENRY TROTTER, of Buglawton, near Congleton, in the County of Chester, Farmer, for an invention for—"Improvements in the manufacture and packing of fire-lighters and artifical fuel." *Letters Patent sealed.*

OLLIS.
7th October 1867.

2821. THOMAS OLLIS, of Netherfield Road South, Liverpool, in the County of Lancaster, Machinist, for an invention for—"Improvements in registering apparatus applicable to omnibuses and other vehicles." *Letters Patent sealed.*

BROWN.
7th October 1867.

2822. JOHN HARCOURT BROWN, of Abbey Mills, Romsey, in the County of Hants, Gentleman, for an invention for—"Improvements in utilizing refuse animal matters and producing skins and sheets therefrom." *Letters Patent sealed; no specification filed.*

GARRATT.
8th October 1867.

2823. RICHARD GARRATT, of Sheffield, in the County of York, Plumber and Gas-fitter, for an invention for—"An improvement in ball and other cocks." *Provisional protection only.*

BENINGFIELD.
8th October 1867.

2824. EDWARD BENINGFIELD, of Old Kent Road, in the County of Surrey, for an invention for—"An improved lifting machine applicable as a fire-escape and for repairing and decorating houses and other buildings." *Provisional protection only.*

DEAN.
TURTON.
8th October 1867.

2825. JOHN DEAN, Engineer, and THOMAS TURTON, Grinder, both of Sheffield, in the County of York, for an invention for—"An improved apparatus for the prevention or consumption of smoke in the furnaces and flues of steam-boilers." *Provisional protection only.*

HULME.
8th October 1867.

2826. JOHN BOSTOCK HULME, of Manchester, Surveyor, for an invention for—"An improved apparatus to be used in excavating." *Letters Patent sealed.*

READING.
READING.
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READING.
8th October 1867.

2827. JOHN READING, SAMUEL ALFRED READING, GEORGE EDWARD READING, and FREDERICK FRANCIS READING, all of Birmingham, in the County of Warwick, Jewellers and Manufacturers, for an invention for—"A new or improved mode of securing or uniting stay, corset or legging busks." *Provisional protection only.*

TICOZZI.
8th October 1867.

2828. ANGELO TICOZZI, of Bedford Street, Bedford Square, in the County of Middlesex, Gentleman, for an invention for—"An improved preparation or lotion for diseases of the eyes." *Provisional protection only.*

BEARD.
8th October 1867.

2829. RICHARD BEARD, junior, of North Road, Clapham Park, in the County of Surrey, for an invention for—"Improvements in stoppers for bottles, jars and other vessels." *Provisional protection only.*

LOVE.
ARMSTRONG.
WIDDOWSON.
8th October 1867.

2830. FRANCIS LOVE, of Grosmont, WILLIAM ARMSTRONG, of the Hollies, Grosmont, and LEVI WIDDOWSON, of Grosmont, all in the County of York, for an invention for—"Improvements in apparatus for boring holes in stone, shale and minerals." *Provisional protection only.*

BROWN.
8th October 1867.

2831. JOHN BAILEY BROWN, of Bartholomew House, Bartholomew Lane, in the City of London, for an invention for—"Improvements in railway carriages and other lamps." *Provisional protection only.*

PLAYER.
8th October 1867.

2832. JOHN PLAYER, of Glaisdale, Yarm, in the County of York, for an invention for—"Improvements in the manufacture and refining of iron and steel." *Provisional protection only.*

WOLFFGANG.
8th October 1867.

2833. ERNEST GEORGE WOLFFGANG, of 11, Staining Lane, in the City of London, Commission Agent, for an invention for—"Improvements in the manufacture of ribbons."—*A communication to him from abroad by Rudolph Klemme, of Crefeld, in the Kingdom of Prussia, Manufacturer.* *Provisional protection only.*

REID.
CRAIGIE.
8th October 1867.

2834. ROBERT REID, Upholsterer, and EDWARD HORNE CRAIGIE, Brassfounder, both of the Town of Kilmarnock, in the County of Ayr, North Britain, for an invention for—"Improvements in mattresses, sofas, couches, ottomans, easy chairs, railway carriage seats and other such like or similar articles." *Letters Patent sealed.*

DANILECKI. 9th October 1867.

2835. ADOLPHE DANILECKI, of 25, Grafton Street, Fitzroy Square, in the County of Middlesex, for an invention for—"A medical electric bath for men and animals, on the filtering principle by triple current which is connected with the earth."—*A communication to him from abroad by Jean Baptiste Marie Potin, of 21, Rue Berault, Vincennes, France.* *Complete specification; Letters Patent sealed.*

BARKER. 9th October 1867.

2836. JOHN BARKER, of Todmorden, in the County of York, for an invention for —"Certain improvements in the method of consuming smoke and in apparatus connected therewith." *Provisional protection only.*

JOHNSON. 9th October 1867.

2837. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in projectiles."—*A communication to him from abroad by Eugène Pertuiset, Auguste Mundel, and Jean Etienne Armide de Fléron, all of Paris, in the Empire of France.* *Letters Patent sealed.*

WALLWORK. 9th October 1867.

2838. HENRY WALLWORK, of the City of Manchester, in the County of Lancaster, Ironfounder and Engineer, for an invention for—"Improvements in machinery for the manufacture of hats." *Letters Patent sealed.*

JAMES. JONES. 9th October 1867.

2839. JOHN JAMES, of Ebbw Vale, Manager, and THOMAS JONES, of Govilon, Forge and Mill Manager, both in the County of Monmouth, for an invention for—"Improvements in the manufacture of rails, bars and other articles of iron, and in the apparatus employed therefor." *Letters Patent sealed.*

POTTS. 9th October 1867.

2840. WILLIAM POTTS, of Handsworth, in the County of Stafford, Manufacturer, for an invention for—"Improvements in gaseliers." *Letters Patent sealed.*

SPRIGHT. 9th October 1867.

2841. JOHN SPRIGHT, of Bradford, in the County of York, Worsted Spinner, for an invention for—"Improvements in machinery or apparatus for spinning, twisting and roving worsted or other fibrous substances, to facilitate the doffing." *Letters Patent sealed.*

SMITH. 9th October 1867.

2842. RICHARD SMITH, junior, of the Unity Flour Mills, Belper, in the County of Derby, for an invention for—"Improvements in mounting and driving millstones." *Letters Patent sealed.*

THOMAS. 9th October 1867.

2843. EDOUARD GEORGE PETER THOMAS, of The Butts, Brentford, in the County of Middlesex, for an invention for—"Improvements in dyeing black and grey, and in preparing materials therefor."—*A communication to him from abroad by Jules Persoz, a person resident at Rue Madame, Paris, Chemist. Provisional protection only.*

NELSON. 9th October 1867.

2844. THOMAS NELSON, of Hope Park, Edinburgh, Publisher, for an invention for—"Improvements in preparing the surfaces of paper or other material for drawing purposes, and in the application of the same to lithographic and other kinds of printing." *Letters Patent sealed.*

WARREN. 9th October 1867.

2845. WILLIAM WARREN, of Cheltenham, in the County of Gloucester, Engineer, for an invention for—"Improvements in the arrangement and construction of street sweeping and cleaning machines." *Letters Patent sealed.*

AVERY. 10th October 1867.

2846. CYRUS AVERY, of Tunkhannock, Wyoming County, Pennsylvania, America, residing at No. 7, Little Cross St., Islington, London, England, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

BROTHERTON. WALDRON. 10th October 1867.

2847. RICHARD BROTHERTON, of Wolverhampton, in the County of Stafford, Wrought-iron Tube Maker, and JOSEPH WALDRON, of Wolverhampton aforesaid, Wrought-iron Tube Maker, for an invention for—"Improvements in the manufacture of lamp posts." *Letters Patent sealed.*

BLACKHURST. 10th October 1867.

2848. THOMAS BLACKHURST, of No. 128, Conway Street, Birkenhead, in the County of Chester, Innkeeper, for an invention for—"A new or improved composition to be used to prevent the oxidation of iron, the fouling of ships' bottoms and other submerged things, and preserving wood from decay and from worms, and also preserving iron and wood exposed to the action of the atmosphere." *Letters Patent sealed.*

HOBHOUSE. 10th October 1867.

2849. ARTHUR FANE HOBHOUSE, of Cadogan Place, Belgrave Square, in the County of Middlesex, Esquire, for an invention for—"Improvements in apparatus for propelling vessels."—*A communication to him from abroad by Reginald Courtenay, Bishop of Kingston, Jamaica, of Bishop's Lodge, Kingston, Jamaica.* *Letters Patent sealed.*

LAKE. 10th October 1867.

2850. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved device for bunging barrels or casks."—*A communication to him from abroad by John Ruigg and Joseph Gambrill Marriott, of St. Louis, Missouri, United States of America.* *Letters Patent sealed.*

TWIGG. 10th October 1867.

2851. GEORGE TWIGG, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in corkscrews." *Letters Patent sealed.*

CLARK. 11th October 1867.

2852. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the preparation or treatment of extracts of madder for dyeing and printing purposes, and in apparatus used in such treatment."—*A communication to him from abroad by Gustave Adolphe Schaaff and Guillaume Ernest Lauth, Merchants, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

GEORGE. 11th October 1867.

2853. RICHARD GEORGE, of Kilburn, in the County of Middlesex, for an invention for—"Improvements in apparatus for warming and ventilating apartments or buildings." *Letters Patent sealed.*

WITHINSHAW. BAKER. 11th October 1867.

2854. JOHN WITHINSHAW, of Birmingham, in the County of Warwick, Mechanical Engineer, and JOHN EDWARD BAKER, of Birmingham aforesaid, Mechanical Engineer, for an invention for—"Improvements in the means or machinery for working or actuating the slide valves of steam pumps and blowing engines." *Letters Patent sealed.*

HAIGH. 11th October 1867.

2855. EDWARD HAIGH, of Leeds, in the County of York, Hat Manufacturer, for an invention for—"Improved machinery or apparatus for planking the bodies of hats." *Letters Patent sealed.*

WILSON. 11th October 1867.

2856. JOHN CHARLES WILSON, of 5, Lime Street, in the City of London, Civil and Mechanical Engineer, for an invention for—"An improved rice unhusking mill." *Provisional protection only.*

WILSON. 11th October 1867.

2857. JOHN CHARLES WILSON, of 5, Lime Street, in the City of London, Civil and Mechanical Engineer, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

DAVIES. 11th October 1867.

2858. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, Civil Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of corsets and in apparatus for taking measurements for the same."—*A communication to him from abroad by François Henri Mariotte and Edouard Turpin, of Paris, Manufacturers.* *Provisional protection only.*

BRÖNNER. 11th October 1867.

2859. JULIUS BRÖNNER, of Frankfort-on-the-Maine, in the Kingdom of Prussia, Manufacturer, for an invention for—"An improvement in the construction of gas-burners." *Complete specification; Letters Patent sealed.*

MAY. GRAHAM. 11th October 1867.

2860. WILLIAM HENRY MAY, of Icknield Street East, Birmingham, Mechanic, and PETER GRAHAM, of Oxford Street, in the County of Middlesex, Upholsterer, for an invention for—"Improvements in stoppers for bottles and other vessels." *Letters Patent sealed.*

HELWIG. 11th October 1867.

2861. ARTHUR HELWIG, of No. 5, Dorset Street, Portman Square, in the County of Middlesex, Engineer, for an invention for—"An improved feed-water apparatus for maintaining a proper water level in steam-boilers and other vessels." *Letters Patent sealed.*

WRIGHT. 11th October 1867.

2862. ROBERT ALFRED WRIGHT, of Homerton, in the County of Middlesex, Engineer, for an invention for—"Improvements in the method of and apparatus for heating." *Provisional protection only.*

LEITENBERGER. 11th October 1867.

2863. EDUARD LEITENBERGER, of Cosmanos, in the Empire of Austria, Chemist, for an invention for—"Improvements in apparatus for separating soluble from insoluble matters, filtering the solutions, and if wished distilling these latter or parts of them." *Provisional protection only.*

ANGELL. 11th October 1867.

2864. GEORGE ANGELL, of Compton Street, Clerkenwell, in the County of Middlesex, Silver Plate Manufacturer, for an invention for—"Improvements in portable fountains." *Provisional protection only.*

NEWTON. 11th October 1867.

2865. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required."—*A communication to him from abroad by Michel Pawlowitch Lwoff, of St. Petersburg, in the Empire of Russia.* *Letters Patent sealed.*

BUTLER. 11th October 1867.

2866. WILLIAM BUTLER, of Wolverhampton, in the County of Stafford, Wholesale Brewer, for an invention for—"An improvement in the rolling of hoop or strip iron for brewers' or other hoops." *Provisional protection only.*

BARLOW. 12th October 1867.

2867. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by François Jean Baptiste Victor Brosser and Charles Edward Brosser, of Paris, in the Empire of France.* *Letters Patent sealed.*

BUCKINGHAM. BLOCKEY. 12th October 1867.

2868. JAMES BUCKINGHAM, Civil Engineer, of Westmoreland Works, Walworth Common, London, S., and JOHN SANDERS BLOCKEY, Chemist, of Westmoreland Works, Walworth Common, London, S., for an invention for—"Improvements in apparatus for regulating the feed of steam-boilers." *Letters Patent sealed.*

COLLETTE. 12th October 1867.

2869. CHARLES HASTINGS COLLETTE, of No. 23, Lincoln's Inn Fields, in the County of Middlesex, for an invention for—"Improvements in the construction of flights of stairs commonly called staircases."—*A communication to him from abroad by Antoine Garzend, of No. 47, Rue de Martyrs, Paris, in the Empire of France.* *Provisional protection only.*

BARÉ. THOMSON. 12th October 1867.

2870. ROBERT FLAMWELL BARÉ, and JOHN THOMSON, both of the City of Glasgow, in the County of Lanark, North Britain, Merchants, for an invention for—"Improvements in the conduction or transmission of fluids, and in the means, apparatus or mechanism employed therefor." *Letters Patent sealed.*

THIERRY. 12th October 1867.

2871. JEAN BAPTISTE PIERRE ALFRED THIERRY, residing at *No. 146, Faubourg St. Denis, Paris*, in the Empire of France, for an invention for—"Improvements in smoke-consuming apparatus for steam-boiler and other furnaces, and in machinery for manufacturing parts of the same." *Complete specification; Letters Patent sealed.*

DUFRENÉ. 12th October 1867.

2872. HECTOR AUGUSTE DUFRENÉ, of No. 10, Rue de la Fidélité, Paris, in the Empire of France, and 4, South Street, Finsbury, London, Civil Engineer, for an invention for—"Improvements in apparatus for decorticating rice and other grain." *A communication from Monsieur Joseph Perre, a person resident at Avignon, in the Empire of France.* *Complete specification; Letters Patent sealed.*

CANHAM. THOMSON. 12th October 1867.

2873. RICHARD CANHAM, of Ray Street, Clerkenwell, in the County of Middlesex, and JAMES THOMSON, of Union Road, New Wandsworth, in the County of Surrey, for an invention for—"Improvements in stoves for consuming gas and other fuel, and in ovens to be used therewith." *Letters Patent sealed.*

LEITENBERGER. 12th October 1867.

2874. EDUARD LEITENBERGER, of Cosmanos, in the Empire of Austria, Chemist, for an invention for—"Improvements in treating madder for the purpose of obtaining purpurine or alizarine from the same, and in apparatus to be made use of thereby." *Provisional protection only.*

FORMAN. 12th October 1867.

2875. HENRY FORMAN, of Chellaston, near Derby, Farmer, for an invention for—"Improvements in the wheels of traction engines." *Provisional protection only*

DRABBLE. 12th October 1867.

2876. JAMES DRABBLE, of Sheffield, in the County of York, Table Knife Manufacturer, for an invention for—"Improvements in the mode of securing handles and scales to every description of cutlery." *Provisional protection only.*

JOHNSON. 12th October 1867.

2877. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in knitting machines."—*A communication to him from abroad by Jules Nicolas Poivret, of Trayes, in the Empire of France, Engineer.* *Letters Patent sealed.*

NICOLL. 12th October 1867.

2878. BENJAMIN NICOLL, of Regent Street, in the County of Middlesex, Shirt Manufacturer, for an invention for—"Improvements in the economical construction of buildings, also in rendering them more secure from fire and damp, and in preserving them from decay." *Letters Patent sealed.*

LAKE. 12th October 1867.

2879. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in electric telegraph apparatus."—*A communication to him from abroad by Elisha Gray, of Oberlin, Ohio, United States of America.* *Complete specification; Letters Patent sealed.*

PEARCE. 14th October 1867.

2880. JOHN CHARLES PEARCE, of the Bowling Iron Works, near Bradford, in the County of York, Engineer, for an invention for—"Improvements in furnaces and fire-grates." *Provisional protection only.*

BLACKE. 14th October 1867.

2881. DAVID ESTLER BLACKE, of Belfast, in the County of Antrim, Ireland, Manufacturer, for an invention for—"Improvements in apparatus for spinning and twisting yarns." *Provisional protection only.*

WARD. 14th October 1867.

2882. EDWARD WARD, of Manchester, in the County of Lancaster, Commercial Traveller, for an invention for—"Improvements in hats and other similar coverings for the head." *Letters Patent sealed.*

GADD. WALKER. 14th October 1867.

2883. WILLIAM GADD, of 122, Portland Road, Nottingham, Consulting Engineer, and BENJAMIN WALKER, of Lenton, near Nottingham, Lace Manufacturer, for an invention for—"Improvements in means or apparatus for the manufacture of narrow fabrics." *Letters Patent sealed.*

FITZPATRICK. 14th October 1867.

2884. MATTHEW FITZPATRICK, of 1, Duke Street, Lincoln's Inn, London, Engineer, for an invention for—"Improvements applicable to railway trains for the prevention of accidents arising from collisions or other casualties on railways." *Provisional protection only.*

REDGATE. MARRIOTT. 14th October 1867.

2885. WILLIAM REDGATE, of Parliament Row, Nottingham, Draftsman, and THOMAS MARRIOTT, of Great Alfred Street, Central Nottingham aforesaid, Lace Manufacturer, for an invention for—"Improvements in the manufacture of lace in twist-lace machines." *Provisional protection only.*

MAYNARD. 14th October 1867.

2886. HENRY NATHAN MAYNARD, of the Viaduct Works, Crumlin, in the County of Monmouth, for an invention for—"Improvements in bridges, piers and landing stages." *Provisional protection only.*

LAKE. 14th October 1867.

2887. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in apparatus or machinery for loading heavy ordnance with balls, shells or other projectiles."—*A communication to him from abroad by James Buchanan Eads, of St. Louis, Missouri, United States of America.* *Letters Patent sealed.*

LAKE. 14th October 1867.

2888. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in revolving batteries and in the means for working the same."—*A communication to him from abroad by James Buchanan Eads, of St. Louis, Missouri, United States of America.* *Letters Patent sealed.*

MENNONS. 14th October 1867.

2889. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of 8, Southampton Buildings, in the County of Middlesex, and 53, Rue de la Chaussée d'Antin, Paris, in the Empire of France, for an invention for—"Improvements in apparatus for transmitting alarm signals and applying brake power in railway trains."—*A communication from Jean Baptiste Jolly, a person resident at No. 26, Boulevard du Prince Eugène, Paris, in France.* *Letters Patent sealed.*

BONNEVILLE. 15th October 1867.

2890. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"Improvements in apparatus for superheating steam and other vapours."—*A communication from Leffert Ryerson Cornell, a person resident in the City and State of New York, United States of America.* *Provisional protection only.*

BONNEVILLE. 15th October 1867.

2891. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in apparatus for threading needles."—*A communication from Giovanni Valania, a person resident at Bergamo, in the Kingdom of Italy.* *Letters Patent sealed.*

VOGL.
VAN DYK.
15th October 1867.

2892. MORITZ VOGL, and HEIMAN VAN DYK, of Castle Street, in the City of London, Manufacturers, for an invention for—"Improvements in articles consisting of muffs combined with bags or similar receptacles, and in the frames of such receptacles." *Letters Patent sealed.*

AITCHISON.
15th October 1867.

2893. ADAM AITCHISON, of No. 11, Wilton Terrace, Peckham, in the County of Surrey, for an invention for—"Improvements in the treatment of hydrocarbons for the production of gas sufficiently permanent to be stored for lighting and heating purposes, and especially in the treatment of the hydrocarbons and other products obtained by distilling or carbonizing coal, wood and other carbonaceous materials, including those obtained in the manufacture of gas and in the distillation of coal tar." *Provisional protection only.*

BAKER.
WOODROFFE.
15th October 1867.

2894. THOMAS HENRY BAKER, Engineer, and THOMAS WOODROFFE, Builder, both of Tonbridge, in the County of Kent, for an invention for—"Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures." *Letters Patent sealed.*

SAMUELSON.
15th October 1867.

2895. MARTIN SAMUELSON, of Hull, in the County of York, Engineer, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

LAKE.
15th October 1867.

2896. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages."—*A communication to him from abroad by Charles Thompson Harvey, of Tarrytown, New York, United States of America.* *Letters Patent sealed.*

LEVESON.
15th October 1867.

2897. HENRY ASTBURY LEVESON, of Belgravia, in the County of Middlesex, for an invention for—"Improvements in pack-saddles." *Provisional protection only.*

LATHAM.
16th October 1867.

2898. BALDWIN LATHAM, of Croydon, in the County of Surrey, for an invention for—"Improvements in the means and apparatus or implements employed for distributing sewage over land." *Letters Patent sealed.*

CLARK.
16th October 1867.

2899. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for producing motive-power by means of compressed air, water or other liquid."—*A communication to him from abroad by Jean Ventouillac and Louis Ventouillac, Boiler Makers, and Edouard Jau, Banker, all of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

PRINCE.
PRINCE.
16th October 1867.

2900. ALEXANDER PRINCE, and ALEXANDER CHARLES MONTAGUE PRINCE, both of the Office for Patents, No. 4, Trafalgar Square, Charing Cross, in the County of Middlesex, for an invention for—"Improvements in telegraphic communication by pneumatic means and in the apparatus employed therein." *Provisional protection only.*

FROST.
16th October 1867.

2901. FREDERICK DUNCH FROST, of the firm of Frost Brothers, of London Street, in the City of London, Rope Manufacturers, for an invention for—"Improvements in rollers used in frames for drawing and spinning or preparing fibrous materials." *Letters Patent sealed.*

TINET.
16th October 1867.

2902. CHARLES TINET, China Manufacturer, of No. 42, Rue du Bac, Paris, in the Empire of France, for an invention for—"Improvements in the construction of chairs and such like seats intended to be used in concert rooms, theatres and other public buildings, and in houses of business." *Provisional protection only.*

GESSNER.
16th October 1867.

2903. ERNEST GESSNER, of Aue, in the Kingdom of Saxony, Manufacturer, for an invention for—"Improvements in the construction of fulling-stocks or fulling-machines." *Letters Patent sealed.*

NEWTON.
16th October 1867.

2904. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in the preparation of wood for increasing the sonorous quality and improving the tone of a piano, violin or other musical instrument to which the wood is to be applied in its construction."—*A communication to him from abroad by William Henry May, of Bridgeport, in the State of Connecticut, United States of America.*
Letters Patent sealed.

PIDGEON.
MANWARING.
17th October 1867.

2905. DANIEL PIDGEON, of the Britannia Iron Works, Banbury, in the County of Oxon, Engineer, and WILLIAM MANWARING, of the same place, also Engineer, for an invention for—"Improvements in reaping and mowing machines."
Letters Patent sealed.

OXLEY.
WILSON.
17th October 1867.

2906. JAMES OXLEY, of Frome, in the County of Somerset, Brewers' Engineer, and GEORGE WILSON, of the same place, Foreman to the said James Oxley, for an invention for—"Improvements in machinery or apparatus for cleansing casks."
Letters Patent sealed.

ADAMS.
17th October 1867.

2907. WILLIAM BRIDGES ADAMS, of Woodstock Lodge, Granville Park, Blackheath, in the County of Kent, Engineer, for an invention for—"Improvements in locomotive engines, vehicles and appendages thereto for better and safer working on railways, tramways and common roads." *Letters Patent sealed.*

WILKIN.
CLARK.
17th October 1867.

2908. MARMADUKE WILKIN, of 2, St. James' Terrace, Harrow Road, Paddington, in the County of Middlesex, Gentleman, and JOHN CLARK, of 3, Orchard Street, Paddington, in the said County, Engineer, for an invention for—"Improvements in the means or mode of signalling upon railways." *Letters Patent sealed.*

LAKE.
17th October 1867.

2909. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in electric telegraph apparatus."—*A communication to him from abroad by C. H. Pond, of Oberlin, Ohio, United States of America.* *Provisional protection only.*

SHAW.
17th October 1867.

2910. EDWARD SHAW, of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in hoods or coverings for perambulators, bath chairs, carriages and other vehicles." *Letters Patent sealed.*

ROSS.
17th October 1867.

2911. ROBERT CRAIB ROSS, of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in mechanism or apparatus employed for cutting paper, pasteboard, textile fabrics and similar substances or materials."
Provisional protection only.

RIVES.
17th October 1867.

2912. JACQUES RIVES, of 13, Rue de Nemours, Paris, in the Empire of France, Mechanician, for an invention for—"Improvements in casting metals, glass and other materials, and in apparatus employed for this purpose."
Letters Patent sealed.

LYNCH.
17th October 1867.

2913. CHARLES STEPHEN LYNCH, of the State of Massachusetts, of the United States of America, for an invention for—"Certain new and useful improvements in governors for steam and various other engines."—*A communication to him by Reuben Kidder Huntoon, a person resident at Boston, in the County of Suffolk and State aforesaid.* *Complete specification; Letters Patent sealed.*

HAMEL.
17th October 1867.

2914. LEOPOLD HAMEL, of Nottingham, Lace Manufacturer, for an invention for—"Improvements in machinery for clipping figured net and similar fabrics."
Letters Patent sealed.

WHITE.
17th October 1867.

2915. OTIS CONVERSE WHITE, of the State of Massachusetts, of the United States of America, for an invention for—"Improvements in chairs for the use of dentists, barbers, photographers or other persons, such invention also being applicable to other useful purposes." *Complete specification; Letters Patent sealed.*

BELL.
RICHARDSON.
17th October 1867.

2916. THOMAS BELL, of 24, Canwick Road, Lincoln, Assistant Secretary to Robey and Co., Limited, of Lincoln aforesaid, Engineers, and JOHN RICHARDSON, of 6, Grantham Street, Lincoln aforesaid, Engineers' Draughtsman, for an invention for—"Improvements in machinery for decorticating or hulling rice and other grain." *Letters Patent sealed.*

WELLS.
17th October 1867.

2917. GEORGE MILES WELLS, of 13, Belitha Villas, Barnsbury, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in apparatus to be employed in the manufacture of boots and shoes." *Letters Patent sealed.*

BANNEHR.
17th October 1867.

2918. JAMES BANNEHR, of the City of Exeter, for an invention for—"Improvements in apparatus for supplying deodorizing matter to dry or earth closets, and in processes of and apparatus for treating the liquid portion of human or animal excreta after removal from such closets or from other receptacles."
Letters Patent sealed.

CUBITT.
17th October 1867.

2919. JAMES CUBITT, of 12, Claremont Place, Loughborough Road, Brixton, in the County of Surrey, for an invention for—"An improved process and composition for the preservation from decay of stone, brick, plaster, metal and other substances, and for hardening or glazing their surfaces so as to prevent smoke or dirt from adhering to them." *Provisional protection only.*

TREDGOLD.
MCNEIL.
17th October 1867.

2920. WILLIAM TREDGOLD, of Russell Street, Blackwall, and JAMES MCNEIL, of Brunswick Road, Bromley, both in the County of Middlesex, for an invention for—"Improvements in steam-boilers and furnaces." *Letters Patent sealed.*

HALE.
18th October 1867.

2921. JOHN HALE, of 8, Stamford Street, in the County of Surrey, for an invention for—"An entwining gaiter or spiral legging." *Provisional protection only.*

PRUDENCIO.
COOPER.
COTTERELL.
18th October 1867.

2922. FRANCISCO PRUDENCIO, FRANK COOPER, and JOSEPH FRANCIS COTTERELL, all of the City of Bath, Aërated Water Manufacturers, for an invention for —"Improvements in stoppers for bottles, which improvements are also applicable to cocks for casks and other like receptacles." *Letters Patent sealed.*

GARRETT.
HOLCROFT.
18th October 1867.

2923. HENRY WILLIAM GARRETT, Civil Engineer, and GEORGE HOLCROFT, Engineer, both of the City of Manchester, for an invention for—"Improvements in fire-arms and ordnance, and in cartridges for the same and for other fire-arms and ordnance." *Letters Patent sealed.*

SHARP.
WEBB.
18th October 1867.

2924. HENRY SHARP, of the Bolton Iron and Steel Company, Bolton, in the County of Lancaster, and FRANCIS WILLIAM WEBB, of the same place, Engineer, for an invention for—"Improvements in the manufacture of smiths' anvils." *Letters Patent sealed.*

CASPER.
18th October 1867.

2925. EDWARD CASPER, of No. 101, Cannon Street, in the City of London, Merchant, for an invention for—"An improved mode of and means for preventing the bursting of the tubes in steam and water pressure gauges, and other tubes or pipes, from the effects of cold."—*A communication to him from abroad by Ernest Dubois, of No.* 188, *Faubourg St. Martin, Paris, in the Empire of France, Steam and Water Gauge Manufacturer.* *Letters Patent sealed.*

HILL.
SHELLEY.
18th October 1867.

2926. JOHN HILL, and SAMPSON SHELLEY, both of Manchester, in the County of Lancaster, for an invention for—"Improvements in looms and in the method or process of preparing weft that will enable the plain loom to weave 'checks' or stripe goods." *Letters Patent sealed.*

HUGHES.
18th October 1867.

2927. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the manufacture of hats and bonnets, and in the apparatus employed therein."—*A communication to him from abroad by Chauncey Orrin Crosby, of New Haven, United States of America.* *Letters Patent sealed.*

TASKER.
18th October 1867.

2928. WILLIAM HENRY TASKER, of Bradford, in the County of York, Glass Blower and Manufacturer, for an invention for—"An improved shuttle eye." *Provisional protection only.*

SEWARD.
SMITH.
18th October 1867.

2929. JAMES SEWARD, and HENRY SMITH, both of Clayton-le-Moors, in the County of Lancaster, Engineers, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

KITCHEN.
18th October 1867.

2930. THOMAS KITCHEN, of Accrington, in the County of Lancaster, Millwright and Engineer, for an invention for—"Improvements in the apparatus used for grinding wheat or other grain." *Provisional protection only.*

BALE.
18th October 1867.

2931. HENRY JOHN BALE, of No. 1, Russell Terrace, Oakley Square, in the County of Middlesex, for an invention for—"Improvements in apparatus to be used in cooking by means of gas." *Letters Patent sealed.*

WHITEHEAD.
18th October 1867.

2932. THOMAS WHITEHEAD, of Holbeck, in the Parish of Leeds, in the County of York, a partner in the firm of 'Taylor, Wordsworth and Company,' Machine and Tool Makers, for an invention for —"Improvements in the processes of and apparatus for roving, spinning and twisting fibrous substances." *Provisional protection only.*

MAURICE.
18th October 1867.

2933. SAMUEL SOLOMON MAURICE, of Monkwell Street, in the City of London, Commission Agent, for an invention for—"An improved fastening for neckties, scarfs, belts and other articles."—*A communication to him from abroad by Simon Hayem, aîné, of* 38, *Rue du Sentier, Paris, France.* *Letters Patent sealed.*

KING.
18th October 1867.

2934. JOHN KING, of Pinxton, in the County of Derby, Mechanician, for an invention for—"Improvements in machinery or apparatus applicable to cages or hoists used in mining or lifting machines." *Letters Patent sealed.*

HOLDEN.
18th October 1867.

2935. JAMES JOHN HOLDEN, of Bermondsey, in the County of Surrey, Engineer, for an invention for—"Improvements in apparatus for cleaning and polishing boots, shoes, knives, forks, plate and other articles." *Provisional protection only.*

MONTAGU.
18th October 1867.

2936. CHARLES MONTAGU, of Cannon Street, in the City of London, Gentleman, for an invention for—"An improvement in the manufacture of bonnets and other like articles of apparel worn on the head by women and children." *Provisional protection only.*

ALEX.
18th October 1867.

2937. MONTAGUE ALEX, of Cheltenham, in the County of Gloucester, Dentist, for an invention for—"Improvements in davits for ships and other vessels." *Provisional protection only.*

WAIDE.
19th October 1867.

2938. FRANCIS WILLIAM WAIDE, of Rotherham, in the County of York, Ironfounder, for an invention for—"Improvements in ceiling cornices and centres, and other indoor ornaments of a similar nature, and in the mode of fixing the same." *Provisional protection only.*

MATTHEWS.
19th October 1867.

2939. MASON JOHNSTON MATTHEWS, of Glasgow, in the County of Lanark, North Britain, Musical Instrument Maker, for an invention for—"Improvements in pianofortes." *Letters Patent sealed.*

LIEBERMANN.
19th October 1867.

2940. WILLIAM LIEBERMANN, of Christian Street, Commercial Road, in the County of Middlesex, for an invention for—"Improvements in the construction of churns." *Provisional protection only.*

LAKE.
19th October 1867.

2941. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Samuel Norris, of Springfield, Massachusetts, United States of America.* *Letters Patent sealed.*

JALOUREAU.
LARDY.
19th October 1867.

2942. ALFRED FAUVIN JALOUREAU, Civil Engineer, of Paris, in the Empire of France, and CHARLES LOUIS LARDY, Doctor of Law and Professor at the Academy Neuchatel (Switzerland), for an invention for—"Improvements in the construction of telegraphic cables and in the apparatus for the manufacture thereof." *Letters Patent sealed.*

NEWTON.
SWAILES.
19th October 1867.

2943. LEOPOLD NEWTON, of Oxton, in the County of Chester, Cotton Merchant, and JOHN SWAILES, of Oldham, in the County of Lancaster, Machinist, for an invention for—"Improvements in corks or stoppers for bottles and in machinery for manufacturing the same." *Letters Patent sealed.*

SCHWARTZ.
19th October 1867.

2944. JOHN SCHWARTZ, of Pelham Street, Mile End New Town, in the County of Middlesex, Sugar Refiner, for an invention for—"Improvements in cooling or refrigerating water." *Letters Patent sealed.*

ADKINS.
19th October 1867.

2945. FRANCIS ADKINS, of the Brades Iron and Steel Works, Rowley Regis, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of hoes." *Provisional protection only.*

ANDERSON.
19th October 1867.

2946. JAMES ANDERSON, of Ballymacarrett, in the County of Down, in Ireland, Felt Manufacturer, for an invention for—"Improvements in the manufacture of felts and in machinery connected therewith." *Provisional protection only.*

BUTTERWORTH.
19th October 1867.

2947. ELLIS BUTTERWORTH, of Calder Cottage, near Rochdale, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery for preparing and spinning cotton or other fibrous substances." *Provisional protection only.*

SHOVE.
19th October 1867.

2948. MAURICE WILLIAM SHOVE, of George Street, Blackfriars Road, for an invention for—"Improvements in the construction of letter boxes, pillar letter boxes, and money and other such like boxes." *Letters Patent sealed.*

WATKINS.
19th October 1867.

2949. RICHARD WATKINS, of Millwall, Poplar, Engineer, for an invention for—"Apparatus for discharging projectiles from vessels or forts below the water line."—*A communication to him from abroad by George Ingle, of Civita Vecchia, in the Roman States.* *Letters Patent sealed.*

HUGHES.
19th October 1867.

2950. HESKETH HUGHES, of Homerton, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of ornaments for dresses and decorative purposes." *Provisional protection only.*

NAIRN.
21st October 1867.

2951. MICHAEL BARKER NAIRN, of Kirkcaldy, in the County of Fife, North Britain, Floor Cloth Manufacturer, for an invention for—"Improvements in power looms." *Provisional protection only.*

CROSSLEY.
HUTCHINSON.
21st October 1867.

2952. WILLIAM CROSSLEY, and THOMAS CHARLES HUTCHINSON, both of Middlesborough-on-Tees, in the County of York, for an invention for—"Improvements in the manufacture of alumina and salts of alumina from blast furnace slag, or from other silicates of alumina containing an excess of lime or magnesia." *Letters Patent sealed.*

BARRETT.
MARTIN.
21st October 1867.

2953. WILLIAM BARRETT, of Norton, in the County of Durham, Ironmaster, and CHARLES MARTIN, of Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in tuyeres for blast furnaces and other purposes." *Letters Patent sealed.*

ABEL.
21st October 1867.

2954. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in screw bolts and nuts for securing fish plates and other objects."—*A communication to him from abroad by Frederic Tudor, of Boston, in the State of Massachusetts, United States of America.* *Provisional protection only.*

HUNTER.
21st October 1867.

2955. JOHN HUNTER, of Greenwich, in the County of Kent, Engineer, for an invention for—"Improvements in the permanent way of and in signalling on railways." *Letters Patent sealed.*

CLAPIER.
21st October 1867.

2956. JEAN CLAPIER, of Paris, Department of Seine, in the Empire of France, Tapestry Maker, for an invention for—"Improvements in the manufacture of pillows, mattresses, feather beds, seats, cushions and other similar articles." *Letters Patent sealed.*

BRANDON.
21st October 1867.

2957. ALEXANDER HORACE BRANDON, Civil Engineer, of 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"An articulated artificial leg."—*A communication to him from Doctor William Becker, a person also residing in Paris, in the Empire of France.* *Letters Patent sealed.*

DUNCOMBE.
21st October 1867.

2958. CECIL DUNCOMBE, of Nawton Grange, in the County of York, for an invention for—"Improvements in apparatus for charging and closing breech-loading cartridge cases." *Letters Patent sealed.*

HUGHES.
21st October 1867.

2959. HESKETH HUGHES, of Homerton, in the County of Middlesex, Engineer, for an invention for—"Improvements in bottles and other like receptacles, and in apparatus for stoppering and unstoppering the same." *Provisional protection only.*

LAKE.
21st October 1867.

2960. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in electric telegraph apparatus."—*A communication to him from abroad by George Little, of the City and State of New York, United States of America, Civil Engineer.* *Letters Patent sealed.*

ADAMS.
22nd October 1867.

2961. JOHN ADAMS, of Number 391, Strand, in the County of Middlesex, for an invention for—"Improvements in the construction of breech-loading revolver fire-arms." *Letters Patent sealed.*

WEBB.
22nd October 1867.

2962. THOMAS WEBB, of Cross Street, Newington Butts, in the County of Surrey, Machinist, for an invention for—"Improvements in the construction of sewing-machines." *Letters Patent sealed.*

RITCHIE.
22nd October 1867.

2963. CHARLES RITCHIE, of No. 15, Victoria Road, Pimlico, in the County of Middlesex, Tobacconist, for an invention for—"Improvements in tobacco pipes." *Provisional protection only.*

LEMIELLE.
22nd October 1867.

2964. THEODORE LEMIELLE, of Valenciennes, in the Empire of France, for an invention for—"Improvements in fans for the ventilation of mines, or for propelling air into furnaces, or for other purposes." *Provisional protection only.*

WALKER.
WALKER.
22nd October 1867.

2965. PETER WALKER, and ANDREW WALKER, both of No. 32, Brougham Road, Dalston, in the County of Middlesex, for an invention for—"Improvements in shoes for horses and other animals." *Provisional protection only.*

THOUMELET. 22nd October 1867.

2966. NICOLAS ALFRED THOUMELET, of Margaret Cottage, Blenheim Grove, Peckham Rye, in the County of Surrey, Gentleman, for an invention for—"An improved method for producing from one piece of writing paper a sheet of note or letter paper and an envelope to enclose the said sheet of paper, also for other improvements connected therewith." *Complete specification; Protection for Six months only.*

JONES. 22nd October 1867.

2967. GRIFFITH JONES, of Ynysgoed, near Llanerchymede, in the County of Anglesey, for an invention for—"Improvements in mounting or applying wheels to road carriages of all kinds." *Provisional protection only.*

WHITE. 22nd October 1867.

2968. JAMES WHITE, of Great Portland Street, in the County of Middlesex, for an invention for—"Improvements in means for ventilating buildings and other places." *Letters Patent sealed.*

BEALE. 22nd October 1867.

2969. WILLIAM BEALE, of Taunton, in the County of Somerset, Builder, for an invention for—"A telescopic apparatus applicable as a temporary or stationary observatory for temporary bridges, building and other purposes." *Letters Patent sealed.*

SAMBIDGE. 22nd October 1867.

2970. HENRY WILLIAM SAMBIDGE, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in sliding gaseliers' chandeliers and other pendent lamps." *Provisional protection only.*

NEWTON. 22nd October 1867.

2971. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in dredging and spice boxes."—*A communication to him from abroad by George Washington Putnam, of Peterborough, in the State of New York, United States of America.* *Letters Patent sealed.*

GRAY. 22nd October 1867.

2972. WILLIAM GRAY, of Sheffield, in the County of York, Saw and File Manufacturer, for an invention for—"Improvements in the manufacture of file blanks and in the machinery or apparatus employed therein." *Letters Patent sealed.*

BROOKES. 22nd October 1867.

2973. WILLIAM BROOKES, of 62, Chancery Lane, London, in the County of Middlesex, Civil Engineer and Patent Agent, for an invention for—"An improved method of treating hides in the process of tanning, and for apparatus employed therein."—*A communication to him from abroad by Moritz Michaelis, Isaac Hallenstein and Arthur Cleghorn, all of Footscray, in the Colony of Victoria.*
Complete specification; Letters Patent sealed.

HADDOCK. 23rd October 1867.

2974. JESSE HADDOCK, of Ratcliffe, in the County of Lancaster, Shuttle Maker, for an invention for—"Improvements in the construction of shuttle tongues."
Provisional protection only.

ABEL. 23rd October 1867.

2975. CHARLES DENTON ABEL, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the means and apparatus for pulverizing substances, more particularly applicable to the pulverization of materials for porcelain paste."—*A communication to him from abroad by Carl Fredrik Tjulander, Lieutenant, and Johan Robert Alsing, Proprietor of Mines, both of Stockholm, in the Kingdom of Sweden.*
Letters Patent sealed.

WELTON. 23rd October 1867.

2976. THOMAS WELTON, of 13, Grafton Street, Fitzroy Square, in the County of Middlesex, Maker of Artificial Limbs, for an invention for—"Ozonized or oxygenated bread, biscuits, cakes and other substances." *Letters Patent sealed; no specification filed.*

BUGG. 23rd October 1867.

2977. FREDERICK JOHN BUGG, of Tacket Street, Ipswich, in the County of Suffolk, Shoe Factor, for an invention for—"Improvements in the manufacture of pressed leather." *Letters Patent sealed.*

SEILER. 23rd October 1867.

2978. FREDERIC SEILER, of Berne, in the Republic of Switzerland, Gentleman, for an invention for—"Improvements in apparatus for compressing air and for working pneumatic railways." *Provisional protection only.*

JEAFFRESON. 23rd October 1867.

2979. CHRISTOPHER SAMUEL JEAFFRESON, of the Royal Free Hospital, London, in the County of Middlesex, Surgeon, for an invention for—"Improved apparatus for treating fractures of the limbs." *Provisional protection only.*

CLARK. 23rd October 1867.

2980. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in steam governors and valves."—*A communication to him from abroad by Francis Johnston Nutz, Philip Estes De Forrest Fairchild and Edward Payson Willson, all of Leavenworth City, State of Kansas, United States of America.* *Letters Patent sealed.*

NORTON. 23rd October 1867.

2981. JAMES LEE NORTON, of Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in sinking or forming wells, and in apparatus to be used for this and similar purposes."—*The same is partly the result of a communication made to him from abroad by Stephen Brewer, of Cortland, New York, United States of America, and is partly his own invention.*

Letters Patent sealed.

CHAMBERS. 24th October 1867.

2982. AARON CHAMBERS, of North Providence, in the County Providence and State of Rhode Island, in the United States of America, File Manager, for an invention for—"Improvements in machinery for the manufacture of files."

Letters Patent sealed; specification filed by order.

ST. MARTIN. 24th October 1867.

2983. HENRI RÉDA ST. MARTIN, of No. 55, Bolsover Street, Marylebone, in the County of Middlesex, for an invention for—"Improvements in ornamenting transparent or partially transparent glass." *Provisional protection only.*

GERHARTZ. 24th October 1867.

2984. FREDRICH GERHARTZ, of Cologne, Rhenish Prussia, for an invention for—"Improvements in the manufacture of manures and disinfectants."

Provisional protection only.

THOM. MACLURE. 24th October 1867.

2985. JAMES THOM, and ALEXANDER MACLURE, of Glasgow, in the County of Lanark, North Britain, Manufacturers, for an invention for—"Improvements in the manufacture of ornamental fabrics." *Provisional protection only.*

THOMSON. 24th October 1867.

2986. ROBERT WILLIAM THOMSON, of Edinburgh, in the County of Mid Lothian, North Britain, Civil Engineer, for an invention for—"An improved wheel for steam carriages to be used on common roads." *Letters Patent sealed.*

ELLISON. STIRK. 24th October 1867.

2987. JOHN ELLISON, and JOSEPH STIRK, both of Leeds, in the County of York, Engineers, for an invention for—"Improved means and apparatus for economizing fuel and consuming smoke in steam-boilers and furnaces."

Letters Patent sealed; no specification filed.

GEDGE. 24th October 1867.

2988. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"A novel kind of nail or tack for upholstery and cabinet work."—*A communication to him from abroad by Louis Gabriel Ragueneau, of 39, Faubourg St. Martin, Paris, France.* *Letters Patent sealed.*

OLNEY. 24th October 1867.

2989. GEORGE OLNEY, of the City of Brooklyn, State of New York, in the United States of America, Gas Engineer, for an invention for—"Improvements in the manufacture and storing of illuminating gas and in apparatus employed therein."

Provisional protection only.

DODGE. 24th October 1867.

2990. JAMES DODGE, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for cutting files."

Letters Patent sealed.

ADCOCK. 24th October 1867.

2991. HENRY ADCOCK, of Woodville, in the County of Leicester, Manager, for an invention for—"Improvements in kilns for burning pipes, tiles, bricks, pots and earthenware." *Letters Patent sealed.*

MITCHELL. 24th October 1867.

2992. JOSEPH MITCHELL, of Sheffield, in the County of York, Spring Maker, for an invention for—"Improvements in buffers and draw springs for railway carriages. *Letters Patent sealed.*

RITCHIE. 24th October 1867.

2993. HENRY RITCHIE, of Billiter Street, in the City of London, Merchant, for an invention for—"Improvements in carriages." *Letters Patent sealed.*

STACKARD. 24th October 1867.

2994. STEPHEN STACKARD, in the employ of Messrs. Farrow and Jackson, of 18, Great Tower Street, in the City of London, for an invention for—"Improvements in bottling apparatus." *Letters Patent sealed.*

CLARK. 24th October 1867.

2995. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for transmitting and multiplying motive-power."——*A communication to him from abroad by François Jobard, Gentleman, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

JOHNSON. 24th October 1867.

2996. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in spinning machinery."—*A communication to him from abroad by James Eaton, of Boston, in the United States of America.* *Letters Patent sealed.*

HARRISON. 24th October 1867.

2997. CHARLES WEIGHTMAN HARRISON, of 21, Oberstein Road, Clapham Junction, in the County of Surrey, Gentleman, for an invention for—"Improved means of preventing incrustation in boilers and other vessels in which water is heated." *Provisional protection only.*

WEARE. 24th October 1867.

2998. ROBERT WEARE, of Compton, in the County of Stafford, Manufacturer, for an invention for—"Improvements in and in apparatus for the treatment and for the reception of urine and fæcal matter." *Letters Patent sealed.*

PALLISER. 24th October 1867.

2999. EDWARD MATTHEW PALLISER, of the Town and County of Newcastle-upon-Tyne, Gentleman, and late a Captain in the 7th Hussars, stationed in India, for an invention for—"Improvements in magazines or reservoirs for containing explosive compounds or liquids and gunpowder." *Provisional protection only.*

FISKEN. FISKEN. 25th October 1867.

3000. WILLIAM FISKEN, of Stamfordham, in the County of Northumberland, Minister of the Gospel, and DAVID FISKEN, of the same place, Engineer, for an invention for—"Improvements in the construction of steam and other boilers." *Letters Patent sealed.*

RUSSO. MACCARONI. 25th October 1867.

3001. GREGORIO RUSSO, and CLAUDIO ALLI MACCARONI, both of No. 51, Viâ Ghibellina, Florence, in the Kingdom of Italy, Civil Engineers, for an invention for—"An improved apparatus for saving lives and property in case of shipwreck at sea." *Provisional protection* NOT *granted.*

STOCKMAN. 25th October 1867.

3002. LAWRENCE STOCKMAN, of Eton, in the County of Bucks, for an invention for—"Improvements in the construction of rollers for window blinds." *Letters Patent sealed.*

GÜNTHER. 25th October 1867.

3003. GUSTAV JULIUS GÜNTHER, of Stamford Hill, in the County of Middlesex, Mining Engineer, for an invention for—"Improvements in plating or protecting ships of war, fortifications and other like structures, and the manufacture of the plates employed therefor." *Letters Patent sealed.*

WILSON. 25th October 1867.

3004. HENRY WILSON, of Stockton-on-Tees, in the County of Durham, for an invention for—"Improvements in cocks or valves for discharging water, oil and other fluids or gases." *Provisional protection only.*

LAKE. 25th October 1867.

3005. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in carpet linings and in machinery for manufacturing the same."—*A communication to him from abroad by George Washington Chipman, of Boston, Massachusetts, United States of America.* *Provisional protection only.*

LAKE. 25th October 1867.

3006. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances."—*A communication to him from abroad by Daniel E. Somes, of Washington, District of Columbia, United States of America.* *Letters Patent sealed.*

STENNETT. 25th October 1867.

3007. THOMAS STENNETT, in the employ of Samuel Fisher, of 188, Strand, in the County of Middlesex, Dressing Case Manufacturer, for an invention for—"Improvements in dressing and other bags." *Provisional protection only.*

CLARK. 25th October 1867.

3008. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the mode of obtaining publicity and affording information or amusement."—*A communication to him from abroad by Paul Baudet, Watch Maker, of 29, Boulevart St. Martin, Paris.* *Complete specification; Letters Patent sealed.*

CLARK. 25th October 1867.

3009. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for the manufacture of postage stamps and other labels, and for reproducing designs on paper or fabrics, and in the preparation of engraved surfaces to be used therefor."—*A communication to him from abroad by Eugène Bordes, junior, Engraver, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

LOVE. 25th October 1867.

3010. PETER LOVE, of Northampton, in the County of Northampton, General Agent, for an invention for—"Improved apparatus for regulating the supply of food to cattle, sheep and other animals." *Letters Patent sealed.*

COOPER.
25th October 1867.

3011. BENJAMIN COOPER, of Frome, in the County of Somerset, Clothier, for an invention for—"Improved machinery for removing knots, burls and other extraneous fabrics from woollen cloth, flannel and other fabrics."
Letters Patent sealed.

HOPKINSON.
HOPKINSON.
25th October 1867.

3012. JOHN ADDY HOPKINSON, and JOSEPH HOPKINSON, junior, both of Huddersfield, in the County of York, Engineers, for an invention for—"Improvements in steam-engine indicators." *Provisional protection only.*

CARTER.
26th October 1867.

3013. ROBERT CARTER, of Leyland, near Preston, in the County of Lancaster, Overlooker, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

DORSETT.
DORSETT.
BLYTHE.
26th October 1867.

3014. GEORGE DORSETT, EDWARD DORSETT, and JOHN BENNINGTON BLYTHE, all of London Street, in the City of London, Merchants, for an invention for—"Improvements in the mode of and apparatus for burning the gases arising from the distillation of liquid hydrocarbons, and also in economizing fuel by the said process."
Letters Patent sealed.

WILEY.
26th October 1867.

3015. WILLIAM EDWARD WILEY, of Birmingham, in the County of Warwick, for an invention for—"Improvements in holders for lead and other marking materials, part of which improvements is also applicable as holders for other articles."
Letters Patent sealed.

LETCHFORD.
26th October 1867.

3016. ROBERT MICHAEL LETCHFORD, of Three Colts Lane, Bethnal Green, Middlesex, for an invention for—"Improvements in the manufacture of matches."
Letters Patent sealed.

LAKE.
26th October 1867.

3017. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved level."—*"A communication to him from abroad by John Webster Cochran, of the City and State of New York, and Charles Wells, of Bridgeport, Connecticut, both in the United States of America.*
Provisional protection only.

NEWTON.
KERSHAW.
26th October 1867.

3018. LEOPOLD NEWTON, of Oxton, in the County of Chester, Cotton Merchant, and THOMAS KERSHAW, of Oldham, in the County of Lancaster, Cigar Merchant, for an invention for —"Improvements in bottles, in corks or stoppers for bottles, and in machinery for making corks or stoppers." *Provisional protection only.*

SMITH.
26th October 1867.

3019. FRANCIS MONTAGU SMITH, of Waltham Abbey, in the County of Essex, Captain in Her Majesty's Royal Artillery, for an invention for—"Improvements in the manufacture of armour plates." *Letters Patent sealed.*

PERRY.
26th October 1867.

3020. JOSEPH JOHN PERRY, of Red Lion Square, in the County of Middlesex, for an invention for—"Improvements in binding or covering books and other similar articles."——*A communication to him from abroad by Jules Alfred Hubert, of Paris, in the Empire of France.* *Letters Patent sealed.*

BROOKS.
26th October 1867.

3021. JOHN BROOKS, of the City of Bristol, Accountant, for an invention for—"Improvements in obtaining motive-power and in apparatus employed therein."
Provisional protection only.

HALL.
26th October 1867.

3022. CHARLES EDWARD HALL, of Meadow Lane, Leeds, in the County of York, Engineer, for an invention for—"Improvements in reaping and mowing machinery."
Provisional protection only.

KENDALL.
26th October 1867.

3023. WILLIAM KENDALL, of Percy Main, in the County of Northumberland, for an invention for—"Improvements in locomotive engines."
Letters Patent sealed.

ASSER.
26th October 1867.

3024. JAMES ASSER, of the firm of Asser and Sherwin, of No. 81, Strand, in the County of Middlesex, Manufacturers of Games, for an invention for—"Improvements in croquet mallets." *Provisional protection only.*

CLARK.
26th October 1867.

3025. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in steam generators."—*A communication to him from abroad by S. Lloyd Wiegand, of Philadelphia, in the State of Pennsylvania, United States of America.* *Provisional protection only*

CLARK.
26th October 1867.

3026. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in railway and other brakes."—*A communication to him from abroad by Martin Henri Rumpf, Merchant, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

PAYNE.
FRASER.
28th October 1867.

3027. WILLIAM PAYNE, and ALEXANDER BLACK FRASER, both of Liverpool, in the County of Lancaster, General Founders and Ship's Ironmongers, for an invention for—"Improvements applicable to ships' and other pumps." *Letters Patent sealed.*

DE SILVA.
28th October 1867.

3028. JOSEPH DE SILVA, of Liverpool, in the County of Lancaster, Painter and Paint Manufacturer, for an invention for—"Improved compositions for coating the bottoms of iron, steel and wooden ships, and other navigable vessels and marine works generally." *Letters Patent sealed.*

SMITH.
28th October 1867.

3029. GEORGE SMITH, of Liverpool, in the County of Lancaster, Brass and Britannia Metal Finisher, for an invention for—"Improvements in marking boards used in the game of billiards, parts of which are applicable to registering the number of persons passing through pay gates or conveyed by vehicles." *Letters Patent sealed.*

BONNEVILLE.
28th October 1867.

3030. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for "A new and improved machine for manufacturing paper bags."—*A communication from Joseph Auguste Puginier, Lieutenant in the 88th Regiment of the Line, a person resident at Lyons, in the Empire of France aforesaid.* *Letters Patent sealed.*

DE BOURRAN.
28th October 1867.

3031. WILLIAM EDMOND DE BOURRAN, of No. 8, Rue Hustin, in the City of Bordeaux, and Empire of France, for an invention for—"Improvements in evaporators for concentrating saccharine fluids." *Letters Patent sealed.*

YOUNG.
28th October 1867.

3032. JOHN YOUNG, of Aspull, in the County of Lancaster, for an invention for—"Improvements in the application of cannel coal 'slack' to the manufacture of gas and coke." *Letters Patent sealed.*

BROOMAN.
28th October 1867.

3033. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the manufacture of lace."—*A communication to him from abroad by Désiré Sival and Leon Sival, both of Roubaix, France.* *Letters Patent sealed.*

WATERLOW.
WATERLOW.
WATERLOW.
28th October 1867.

3034. ALFRED JAMES WATERLOW, WALTER BLANDFORD WATERLOW, and SYDNEY HEDLEY WATERLOW, all of Carpenter's Hall, London Wall, in the City of London, Manufacturing Stationers, Lithographers and Printers, for an invention for—"Improvements in machines for printing from copper, steel and other metal plates, applicable also for printing from lithographic stones." *Letters Patent sealed.*

GLOVER.
28th October 1867.

3035. JOHN GLOVER, of 46, Sekforde Street, Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in furnaces for steam-boilers and other uses." *Letters Patent sealed.*

HENRY.
28th October 1867.

3036. MICHAEL HENRY, of 68, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in balloons and in apparatus employed in connection therewith."—*A communication to him from abroad by Henry Giffard, of 33, Boulevart St. Martin, Paris, France.* *Letters Patent sealed.*

BENNETT.
28th October 1867.

3037. THOMAS BENNETT, of Birmingham, in the County of Warwick, Iron Merchant and Manufacturer, for an invention for—"Improvements in the manufacture of spoons, forks and ladles." *Letters Patent sealed.*

POTTS.
28th October 1867.

3038. WILLIAM POTTS, of Handsworth, in the County of Stafford, Manufacturer, for an invention for—"Improvements in making moulds for the manufacture of metallic screws." *Letters Patent sealed.*

MEADE.
28th October 1867.

3039. The Honble. HERBERT GEORGE PHILLIP MEADE, Lieutenant in the Royal Navy, of Belgrave Square, in the County of Middlesex, for an invention for—"Improvements in fire-arms and ordnance and in projectiles therefor." ***Provisional protection only.***

DE CRESALLES. 28th October 1867.

3040. VICTOR VICOMTE DE CRESALLES, of the Boulevart Malesherbes, Paris, in the Empire of France, at present residing at the Charing Cross Hotel, Strand, in the County of Middlesex, for an invention for—"Improvements in apparatus for obtaining power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams."—*A communication to him from abroad by Louis Roman, a person resident at Rue de Seine, Paris, aforesaid.* *Provisional protection only.*

LAKE. 28th October 1867.

3041. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in centrifugal machines for separating liquid from solid matter."—*A communication to him from abroad by David McColley Weston, of Boston, Massachusetts, United States of America.*
Complete specification; Letters Patent sealed.

WILSON. 29th October 1867.

3042. EDWARD BROWN WILSON, of Bolton, in the County of Lancaster, Engineer, for an invention for—"Improvements in furnaces."
Letters Patent sealed.

EDWARDS. 29th October 1867.

3043. GRAHAM WILLIAM BETHAM EDWARDS, of Bredfield, in the County of Suffolk, Farmer, for an invention for—"Improvements in machines for dibbling and dropping seed and corn." *Provisional protection only.*

SMYTH. KIRBY. 29th October 1867.

3044. JAMES SMYTH, of 59, Wood Street, Woolwich, in the County of Kent, and SAMUEL KIRBY, of Harpur Place, Bedford, for an invention for—"Improvements in clarionets, flutes, bassoons, saxhophones, sarrusophones and other keyed wind musical instruments." *Letters Patent sealed.*

HUGHES. 29th October 1867.

3045. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in machines for twisting lines, cords, ropes and cables, and hanking and coiling the same."—*A communication to him from abroad by Chauncey Orrin Crosby, of New Haven, Connecticut, United States of America.* *Letters Patent sealed.*

CARTER. 29th October 1867.

3046. JOSEPH THRELFALL CARTER, of Sydenham, in the County of Kent, for an invention for—"Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein."
Provisional protection only.

BISHOP. BURNINGHAM. 29th October 1867.

3047. WILLIAM BISHOP, Engineer, and BENJAMIN BURNINGHAM, Builder, both of Pratt Street, Camden Town, in the County of Middlesex, for an invention for—"Improvements in apparatus for preventing effluvia entering tanks or cisterns from the waste pipe." *Letters Patent sealed.*

JOHNSON. 29th October 1867.

3048. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in cleaning cotton and cotton seeds, and in the machinery or apparatus employed therein."—*A communication to him from abroad by Felix Figon, of Paris, in the Empire of France.*
Provisional protection only.

SAVAGE. 29th October 1867.

3049. WILLIAM PEACOCK SAVAGE, of Hilgay, near Downham, in the County of Norfolk, for an invention for—"Improvements in machinery for excavating, raising and depositing soil." *Letters Patent sealed.*

PERKINS. 29th October 1867.

3050. LOFTUS PERKINS, of 6, Seaford Street, Gray's Inn Road, Engineer, for an invention for—"Improvements in actuating the valves of water and other meters, and of engines for obtaining motive-power." *Letters Patent sealed.*

DAVIES. 30th October 1867.

3051. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved mode of preventing incrustation in and removing it from steam-boilers."—*A communication to him from abroad by Josiah Johnson Allen, of Philadelphia, Pennsylvania, United States of America.*
Letters Patent sealed.

BOWHAY. 30th October 1867.

3052. WILLIAM HENRY ANGEL BOWHAY, of Modbury, in the County of Devon, for an invention for—"Improvements in the construction of horse ploughs."
Letters Patent sealed.

FEATHER.
30th October 1867.

3053. JAMES FEATHER, of Howarth, near Keighley, in the County of York, for an invention for—"Improvements in or applicable to 'cap frames' employed in spinning worsted or other fibrous substances." *Provisional protection only*

MADDOCKS.
30th October 1867.

3054. JOHN MADDOCKS, of Manchester, in the County of Lancaster, Mechanic, for an invention for—"Improvements in the method of and apparatus for securing nuts and bolts employed on the permanent way of railways." *Letters Patent sealed.*

FENBY.
30th October 1867.

3055. JOSEPH BEVERLEY FENBY, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in valves for hydraulic presses and for other purposes." *Letters Patent sealed.*

SYMONDS.
30th October 1867.

3056. THOMAS EDWARD SYMONDS, of Adam Street, Adelphi, in the County of Middlesex, Captain in the Royal Navy, for an invention for—"Improvements in the construction of ships and other vessels propelled by screws." *Letters Patent sealed.*

PIERCY.
30th October 1867.

3057. FREDERICK PIERCY, of Somerset Chambers, Strand, in the County of Middlesex, for an invention for—"Improvements in the method of tinting or colouring photographs, engravings, water colour and other drawings, or porcelain." *Letters Patent sealed.*

JOHNSON.
30th October 1867.

3058. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in racks or holders for whips, canes and other like articles."—*A communication to him from abroad by Edward Richmond, of New York, in the United States of America.* *Provisional protection only.*

CAITHNESS.
30th October 1867.

3059. The Right Honourable JAMES, EARL OF CAITHNESS, of Hill Street, in the County of Middlesex, for an invention for—"An improved mode of and apparatus for cleaning boiler tubes." *Provisional protection only.*

NEWTON.
30th October 1867.

3060. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the ventilation of buildings, ships and carriages."—*A communication to him from abroad by Herrn Schrrath, Engineer, of Bielefeld, in the Kingdom of Prussia.* *Letters Patent sealed.*

JOBSON.
JOBSON.
31st October 1867.

3061. CHRISTOPHER JOBSON, of Newcastle-on-Tyne, and JOHN JOBSON, of Poplar, in the County of Middlesex, Marine Engineers, for an invention for—"Improvements in screw propellers." *Letters Patent sealed.*

CLEGG.
31st October 1867.

3062. ROBERT CLEGG, of Islington, in the County of Middlesex, Engineer, for an invention for—"Improvements in the construction of pumps." *Letters Patent sealed.*

HALL.
WREN.
BRANDWOOD.
31st October 1867.

3063. WILLIAM HALL, of Ashton-under-Lyne, in the County of Lancaster, JOHN WREN, and JAMES BRANDWOOD, both of Manchester, in the same County, for an invention for—"Certain improvements in the method of casting, forming or producing toothed wheels or gearing to be employed in machinery for preparing, spinning and twisting cotton or other fibrous substances." *Letters Patent sealed.*

DIXON.
31st October 1867.

3064. WILLIAM SMITH DIXON, residing at Bellisle, in the County of Ayr, Scotland, Esquire, for an invention for—"A new process of producing a blue dye or colouring matter." *Letters Patent sealed.*

DONNER.
31st October 1867.

3065. ERNEST DONNER, of Brussels, in the Kingdom of Belgium, Manufacturer, for an invention for—"An improved method of and apparatus for clearing skins destined for hatters' furs, from the coarse hairs (kemp, bristles or sleekcoats) by combustion." *Letters Patent sealed.*

CAIRD.
ROBERTSON.
31st October 1867.

3066. JAMES TENNANT CAIRD, and STEWART ROBERTSON, both of Greenock, in the County of Renfrew, North Britain, Engineers, for an invention for—"Improvements in transmitting motive-power and in mechanism or apparatus employed therefor." *Letters Patent sealed.*

EVANS.
31st October 1867.

3067. ORMROD COFFEEN EVANS, of West Dulwich, in the County of Surrey, for an invention for—"Improvements in digging machinery." *Letters Patent sealed.*

LAKE.
31st October 1867.

3068. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved cap for upholstery or furniture springs."—*A communication to him from abroad by Ambrose Tower, of the City and State of New York, United States of America.* *Provisional protection only.*

LAKE.
31st October 1867.

3069. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of and apparatus for exhausting or rarefying the air in vessels for food-preserving, distilling and other purposes."—*A communication to him from abroad by James Gordon and John Archbald, both of San Francisco, California, United States of America.* *Letters Patent sealed.*

KENDRICK.
31st October 1867.

3070. ISAIAH KENDRICK, of Walworth, in the County of Surrey, Steam-Boiler Manufacturer, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

WATKINS.
31st October 1867.

3071. JOHN WATKINS, of Balsall Heath, in the County of Worcester, Machinist, for an invention for—"Improvements in axles for carriages." *Letters Patent sealed.*

CHAPLIN.
31st October 1867.

3072. ALEXANDER CHAPLIN, of Chelsea, in the County of Middlesex, Engineer, for an invention for—"An improved portable distilling apparatus for producing fresh aërated water from sea water, part of which said apparatus is also applicable to the burning of hydrocarbon oils for other purposes." *Letters Patent sealed.*

SYKES.
31st October 1867.

3073. DAVID SYKES, of Ashton-under-Lyne, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for decorticating, hulling or husking pearl barley or other similar grain." *Provisional protection only.*

TEW.
31st October 1867.

3074. FREDERICK TEW, of Castle Street, Falcon Square, in the City of London, Brace Manufacturer, for an invention for—"Improvements in drawer suspenders and brace fastenings." *Provisional protection only.*

RODEN.
1st November 1867.

3075. RICHARD BROWN RODEN, of Usk, in the County of Monmouth, Gentleman, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

STURGEON.
1st November 1867.

3076. JOHN STURGEON, of Bolton-le-Moors, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith." *Letters Patent sealed.*

HUNTER.
HUNTER.
1st November 1867.

3077. HUGH HUNTER, and GEORGE SCROGGIE HUNTER, both of Liverpool, in the County of Lancaster, Hat and Cap Manufacturers, for an invention for—"Improvements in the construction of hats and caps." *Provisional protection only.*

HAYCRAFT.
1st November 1867.

3078. GEORGE HAYCRAFT, of Lombard Street, in the City of London, for an invention for—"Improvements in apparatus for filling flasks, canisters and other receptacles with gunpowder." *Provisional protection only.*

GILMOUR.
1st November 1867.

3079. JAMES GILMOUR, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in the construction of pianofortes." *Letters Patent sealed.*

PARR.
STRONG.
2nd November 1867.

3080. SAMUEL PARR, and ALFRED STRONG, both of College Hill, Cannon Street, in the City of London, Architects and Surveyors, for an invention for—"Improvements in the construction of buildings, arches, bridges, coffer-dams, wharf walls and such like structures, and in the floors and roofs of buildings, and floors in other situations." *Letters Patent sealed; no specification filed.*

WRIGHT.
NAIRN.
2nd November 1867.

3081. JOHN WRIGHT, Manager, and MICHAEL BARKER NAIRN, Floorcloth Manufacturer, both of Kirkcaldy, in the County of Fife, North Britain, for an invention for—"Improvements in power looms." *Letters Patent sealed.*

SOUL.
2nd November 1867.

3082. MATTHEW AUGUSTUS SOUL, of No. 3, Leadenhall Street, in the City of London, Patent Agent, for an invention for—"Improvements in the mode of and instruments or tools for securing the metal bolts employed in the construction of timber ships and other structures."—*A communication to him from abroad by Johann Carl Hammer, of the City of Lubeck, in Germany, Engineer.* *Provisional protection only.*

DARCEY.
2nd November 1867.

3083. WILLIAM DARCEY, of Aberclyn, in the County of Brecknock, Wales, but now residing at Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in fastening and strengthening gates and in the means employed therefor." *Letters Patent sealed.*

SCOTT.
2nd November 1867.

3084. JOHN SCOTT, of 20, Westmorland Place, City Road, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in shades for gas and other lamps, and in the mode of fitting or applying the same." *Provisional protection only.*

AVENELL.
2nd November 1867.

3085. ALFRED GEORGE AVENELL, of Bethnal Green, in the County of Middlesex, Timber Merchant, for an invention for—"A new or improved frame or support for packing or carrying bottles in cases, together with a new or improved hinge for boxes and cases." *Letters Patent sealed.*

GEDGE.
2nd November 1867.

3086. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved hat cover."—*A communication to him from abroad by Auguste Brunier, of* 15, *Passage des Petites Ecuries, Paris, in the Empire of France, Merchant.* *Letters Patent sealed.*

GRYLLS.
NEVILLE.
HOLT.
2nd November 1867.

3087. HENRY WILLIAM GRYLLS, of Dalston, Civil Engineer, HENRY NEVILLE, of Mile End, Builder, and JAMES HOLT, of Hackney Road, Gentleman, all in the County of Middlesex, for an invention for—"Improved apparatus for obtaining and applying motive-power." *Provisional protection only.*

PARRY.
2nd November 1867.

3088. RICHARD PARRY, of Newtown, in the County of Montgomery, for an invention for—"Improvements in corsets." *Provisional protection only.*

HICKS.
2nd November 1867.

3089. JAMES JOSEPH HICKS, of Hatton Garden, in the County of Middlesex, for an invention for—"Improvements in the manufacture of backs and handles for brushes." *Letters Patent sealed.*

CLARK.
2nd November 1867.

3090. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for producing motive-power."—*A communication to him from abroad by William C. Stiles, of Nevada City, Nevada County, State of California, United States of America.* *Letters Patent sealed.*

CUTTS.
BROOKSBANK.
2nd November 1867.

3091. THOMAS BUTLER CUTTS, of Wilford, in the County of Nottingham, Lace Manufacturer, and FRANCIS WILLIAM BROOKSBANK, of the Town of Nottingham, Draughtsman, for an invention for—"Improvements in the manufacture of laces in twist lace machines." *Letters Patent sealed.*

COOKE.
FRANCIS.
2nd November 1867.

3092. WILLIAM COOKE, of No. 24, Jermyn Street, in the County of Middlesex, and WALTER FRANCIS, of No. 8, Dorset Street, Clapham, in the County of Surrey, for an invention for—"Improvements in mats and matting." *Letters Patent sealed.*

ORR.
4th November 1867.

3093. JAMES ORR, of the City of Glasgow, in the County of Lanark, North Britain, Manufacturer, for an invention for—"Improvements in doubling, folding or plaiting woven or other web fabrics, and in the machinery or apparatus employed therein or connected therewith." *Letters Patent sealed.*

RILEY.
4th November 1867.

3094. CHARLES RILEY, of Whetstone, near Leicester, in the County of Leicester, Portable Steam Engine Owner, for an invention for—"Improvements in tubular boilers." *Letters Patent sealed.*

DAY.
4th November 1867.

3095. WILLIAM DAY, of Westwood Park, Forest Hill, in the County of Kent, Gentleman, for an invention for—"Improvements in the mode of applying metal sheathing to composite ships with iron fastenings." *Letters Patent sealed.*

FRASER.
DUNCAN.
4th November 1867.

3096. JAMES FRASER, of Liverpool, in the County of Lancaster, Stationer, and GEORGE DUNCAN, of the same place, Engineer, for an invention for—"Improvements in counter-check books." *Provisional protection only.*

DICKINSON.
4th November 1867.

3097. WILLIAM DICKINSON, of Leeds, in the County of York, Machine and Tool Maker, for an invention for—"Improved means of joining leather or other material in the constructing or repairing of straps or driving belts for machinery." *Letters Patent sealed.*

ACKROYD.
HODGSON.
4th November 1867.

3098. REUBEN ACKROYD, of Halifax, in the County of York, Overlooker, and GEORGE HODGSON, of Bradford, in the same County, Machine Maker, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

CLARKE. HOLT. 4th November 1867.

3099. JAMES CLARKE, junior, of Rochdale, in the County of Lancaster, Manager, and THOMAS HOLT, of the same place, Machine Maker, for an invention for—"Improvements in warping and in machinery or apparatus employed therein."
Provisional protection only.

BAGULEY. 4th November 1867.

3100. ROWLAND BAGULEY, of Blackburn, in the County of Lancaster, Shuttle Maker, for an invention for—"Improvements in the manufacture of shuttles employed in weaving."
Provisional protection only.

HEBDEN. 4th November 1867.

3101. HERBERT HEBDEN, Cotton Spinner, of Bolton, in the County of Lancaster, for an invention for—"Certain improvements in mules for spinning, doubling or twining cotton or other fibrous substances."
Letters Patent sealed.

HARRISON. 4th November 1867.

3102. ARTHUR ARMSTRONG LOCK HARRISON, of Harley Road, Brompton, in the County of Middlesex, Gentleman, for an invention for—"An improved label band."
Provisional protection only.

WRIGHT. FOX. 4th November 1867.

3103. THOMAS WRIGHT, and ISAAC FOX, both of the Town and County of the Town of Nottingham, Lace Manufacturers, for an invention for—"Improvements in machinery or apparatus for producing plain and fancy weavings in bobbin net or twist lace machines."
Letters Patent sealed.

BIRKENRUTH. 4th November 1867.

3104. NATHAN BIRKENRUTH, of Hatton Garden, in the County of Middlesex, Commission Agent, for an invention for—"Improvements in mattresses, cushions, sofas, seats and other similar articles."—*A communication to him from abroad by Friedrich August Kandler, of Chemnitz, in the Kingdom of Saxony.*
Provisional protection only.

KIDD. 4th November 1867.

3105. JOSHUA KIDD, of Paul's Wharf, in the City of London, Gas Engineer, for an invention for—"Improvements in obtaining artificial light and in the apparatus employed therein."
Provisional protection only.

NEWTON. 4th November 1867.

3106. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by John Squire Andrews, of the City and State of New York, United States of America.*
Letters Patent sealed.

NEWTON. 4th November 1867.

3107. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of covering steel or iron plates with copper, and manner of arranging or disposing such plates."—*A communication to him from abroad by Edwin Turner Ligon and Thomas Jackson Foster, both of Demopolis, in the State of Alabama, United States of America.*
Letters Patent sealed.

LAKE. 4th November 1867.

3108. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc."—*A communication to him from abroad by Austin Goodyear Day, of Seymour, Connecticut, United States of America.*
Letters Patent sealed.

MARSHALL. 5th November 1867.

3109. WILLIAM MARSHALL, of Old Basford, in the County of Nottingham, Clipper of Lace and other fabrics, for an invention for—"Improvements in machinery or apparatus employed in the clipping of lace and other fabrics."
Provisional protection only.

ALLMAN. GISBORNE. 5th November 1867.

3110. HERBERT ALLMAN, of Ampthill Square, in the County of Middlesex, Civil Engineer, and FREDERIC NEWTON GISBORNE, of 445, West Strand, in the said County, Civil Engineer and Electrician, for an invention for—"Improvements in apparatus to be applied to lamps and burners for the more perfect combustion of carburetted gases."
Letters Patent sealed.

VERDALLE. 5th November 1867.

3111. ANTOINE VERDALLE, of No. 15, Passage des Petites Ecuries, Paris, in the Empire of France, Joiner, for an invention for—"Improved means for closing doors or windows."
Provisional protection only.

WINGATE. 5th November 1867.

3112. THOMAS WINGATE, junior, of Whiteinch, in the County of Lanark, North Britain, Engineer and Shipbuilder, for an invention for—"Improvements in anchors."
Letters Patent sealed.

BRIGGS. YATES. 5th November 1867.

3113. THOMAS BRIGGS, junior, of Manchester, in the County of Lancaster, Tarpauling Manufacturer, and WALTER EDWARD YATES, of Strangeways, in the same County, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

FOSTER. BUNNEY. 5th November 1867.

3114. SAMUEL HALL FOSTER, and THOMAS BUNNEY, both of Leicester, Manufacturers, for an invention for—"Improvements in the manufacture of looped fabric for braces." *Provisional protection only.*

SMYTH. 5th November 1867.

3115. HENRY SMYTH, of Little Trinity Lane, in the City of London, Manufacturer, for an invention for—"Improvements in umbrellas, parasols and sunshades." *Provisional protection only.*

ADEANE. 5th November 1867.

3116. HENRY ADEANE, of 108, Stanhope Street, Hampstead Road, London, Manufacturer, for an invention for—"An improved apparatus for protecting the eyes from wind, dust, snow and the inclemency of the weather." *Provisional protection only.*

BROOMAN. 5th November 1867.

3117. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in reckoning, counting or calculating apparatus."—*A communication to him from abroad by Charles Denis Labrousse, of Paris, France.* *Letters Patent sealed.*

VINE. 5th November 1867.

3118. EDWARD CHARLES VINE, Manager to Messieurs L. H. and R. Lyons, of Cox's Court, Little Britain, in the City of London, Manufacturers, for an invention for—"Improvements in stays, corsets, bodices and riding belts." *Letters Patent sealed.*

CLARK. 5th November 1867.

3119. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in railway and other brakes."—*A communication to him from abroad by Désiré Parfait Lefèvre and Louis Philippe Dorré, Engineer, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

PALMER. HIRD. 5th November 1867.

3120. ROBERT PALMER, of 35, Ovington Square, in the County of Middlesex, and HENRY SAMUEL HIRD, of 1, Hurst Villas, South Croydon, in the County of Surrey, trading under the firm of Chapman and Co., St. James's Mills, Hatcham, S.E., for an invention for—"Improvements in the manufacture of wheaten flour and bread." *Letters Patent sealed.*

GEEVES. 5th November 1867.

3121. WILLIAM GEEVES, of 51, Thornhill Square, Barnsbury, in the County of Middlesex, for an invention for—"Improvements in the construction of panel doors and frames." *Letters Patent sealed.*

NEWTON. 5th November 1867.

3122. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in steam-boilers."—*A communication to him from abroad by John Benjamin Root, of the City of New York, United States of America.* *Letters Patent sealed.*

NEWTON. 5th November 1867.

3123. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in roller or anti-friction journal boxes or bearings, applicable also to the hubs of wheels."—*A communication to him from abroad by Edward Wadhams, of Yorkville, in the State of New York, United States of America.* *Letters Patent sealed.*

MCDOUGALL. 5th November 1867.

3124. ARTHUR MCDOUGALL, of the firm of McDougall Brothers, of the City of Manchester, Manufacturing Chemists, for an invention for—"Improvements in apparatus for stirring or agitating solid substances, and for exposing them to the action of the air, gases and vapours." *Letters Patent sealed.*

HILL. 5th November 1867.

3125. JAMES WILLIAM ROWLAND HILL, of Boston, Massachusetts, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"An improved mode of and means for propelling rocking-horses, carriages and other vehicles." *Provisional protection only.*

LEAKE. BECKETT. 6th November 1867.

3126. ROBERT LEAKE, of the Strangeways Engraving Works, Manchester, in the County of Lancaster, and JOSEPH BECKETT, of the same place, Machine Superintendent, for an invention for—"Improvements in machinery for polishing cylinders." *Letters Patent sealed.*

PRENTICE. 6th November 1867.

3127. EUSTACE CAREY PRENTICE, of Stowmarket, in the County of Suffolk, for an invention for—"Improvements in the treatment of gun cotton and charges or cartridges made therefrom, as also in the processes employed in their manufacture." *Letters Patent sealed.*

CASHIN.
6th November 1867.

3128. THOMAS FREDERICK CASHIN, of Sheffield, in the County of York, Civil Engineer, for an invention for—"Improvements in apparatus for working and governing the action of railway points and signals, a part of which is applicable for other purposes." *Provisional protection only.*

BONNEVILLE.
6th November 1867.

3129. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the method or means for preserving pasty matters and substances, and apparatus therefor."—*A communication from Edouard Charton, a person resident at Rue Lepic, in Paris aforesaid, Painter.* *Letters Patent sealed.*

GEDGE.
6th November 1867.

3130. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in venetian blinds."—*A communication to him from abroad by Pierre Théophile Berton, of 39, Faubourg St. Martin, Paris, France.* *Provisional protection only.*

NEWTON.
6th November 1867.

3131. ROBERT NEWTON, of Lower Providence Mill, near Keighley, in the County of York, for an invention for—"Improvements in fuel feeding apparatus for steam-boilers." *Letters Patent sealed.*

BAGGS.
6th November 1867.

3132. ISHAM BAGGS, of High Holborn, in the County of Middlesex, for an invention for—"Improvements in preparing and oxidising certain substances capable of producing chlorine." *Provisional protection only.*

THORNTON.
THORNTON.
6th November 1867.

3133. EDWIN THORNTON, and ROBERT THORNTON, of Elland, in the County of York, Woollen Manufacturers and Cotton Spinners, for an invention for—"Improvements in steam-boiler and other furnaces." *Provisional protection only.*

PEARSON.
SPURR.
6th November 1867.

3134. WILLIAM PEARSON, and WILLIAM SPURR, of Birstal, near Leeds, in the County of York, Machine Makers and Ironfounders, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

BOTTERILL.
6th November 1867.

3135. JOHN BOTTERILL, of Leeds, in the County of York, Dyer and Finisher, for an invention for—"Improvements in the dyeing of textile fabrics." *Provisional protection only.*

LAKE.
6th November 1867.

3136. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the manufacture of waterproof fabrics and in articles formed of the same."—*A communication to him from abroad by William Augustus Torry, of Mont Clare, New Jersey, United States of America, Manufacturer.* *Letters Patent sealed.*

CLARK.
6th November 1867.

3137. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in pianofortes."—*A communication to him from abroad by Luigi Caldera, Mechanical Engineer, Ludovic Monte, Dealer in Pianos, and Stefano Brossa, Priest, all of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

HETT.
7th November 1867.

3138. CHARLES LOUIS HETT, of Bolton, in the County of Lancaster, Engineer, for an invention for—"Improvements in the governors of steam and other motive-power engines." *Letters Patent sealed.*

BARDSLEY.
BLACKSHAW.
7th November 1867.

3139. THOMAS ROTHWELL BARDSLEY, of the City of Manchester, Watchman, and WILLIAM BLACKSHAW, of Manchester aforesaid, Boot Maker, for an invention for—"Improvements in apparatus for smoke consuming in steam-boiler and other furnaces." *Letters Patent sealed.*

BAKER.
7th November 1867.

3140. THOMAS JAMES BAKER, of Farndon, near Newark, in the County of Nottingham, Miller, for an invention for—"Improvements in the manufacture of wheat and other grain into flour, and in the machinery connected therewith." *Letters Patent sealed.*

SEPHTON.
7th November 1867.

3141. EDWARD SEPHTON, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"Improvements in the construction or arrangement of blocks of so-called workmen's dwellings." *Complete specification; Protection for six months only.*

RANKINE.
7th November 1867.

3142. WILLIAM JOHN MACQUORN RANKINE, of the University of Glasgow, Professor of Civil Engineering and Mechanics, for an invention for—"Improvements in governors for obtaining uniform rotation." *Provisional protection only.*

BRIGHT.
7th November 1867.

3143. CHARLES HERBERT BRIGHT, of Victoria Street, Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in tramways or railways for streets or roads, and wheels adapted to run thereon."
Complete specification; Letters Patent sealed.

BRIGHT.
7th November 1867.

3144. CHARLES HERBERT BRIGHT, of Victoria Street, Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements applicable to carriages for tramways or railways for streets or roads." *Provisional protection only.*

SACRÉ.
7th November 1867.

3145. EDWARD SACRÉ, of Parliament Street, in the City of Westminster, Engineer, for an invention for—"Improvements in the construction of armour for the defence of ships, forts, batteries and other constructions."
Provisional protection only.

NEWNHAM.
7th November 1867.

3146. BENJAMIN THOMAS NEWNHAM, of the City of Bath, Carriage Builder, for an invention for—"Improvements in tables or apparatus to be used in playing games with balls." *Letters Patent sealed.*

HEWITT.
7th November 1867.

3147. ISAAC HEWITT, of No. 14, Grange Street, Hoxton, in the County of Middlesex, Engineer, for an invention for—"An improved machine for forming, printing and counting labels." *Provisional protection only.*

BRINJES.
7th November 1867.

3148. JOHN FREDERICK BRINJES, of Fieldgate Street, Whitechapel, in the County of Middlesex, Engineer, for an invention for—"Improvements in apparatus for distilling, heating, evaporating and cooling liquids." *Letters Patent sealed.*

WHEELER.
7th November 1867.

3149. JAMES WHEELER, of 210, Regent's Street, in the County of Middlesex, Hosier and Glover, for an invention for—"Improvements in gloves."
Letters Patent sealed.

ROBINSON.
7th November 1867.

3150. RALPH ROBINSON, of Rochdale, Chemist and Druggist, for an invention for—"Improvements in the manufacture of filtering paper."
Letters Patent sealed.

CLARK.
7th November 1867.

3151. THOMAS CLARK, of 11, Gray's Inn Square, in the County of Middlesex, for an invention for—"Improvements in the permanent way of railways."
Letters Patent sealed.

BLACKBURN.
8th November 1867.

3152. THOMAS BLACKBURN, of Blackburn, in the County of Lancaster, Mechanic, for an invention for—"Improvements in looms for weaving."
Letters Patent sealed.

ANDERSON.
8th November 1867.

3153. CHARLES ANDERSON, of Fettykil, Leslie, in the County of Fife, North Britain, Manufacturer, for an invention for—"Improvements in apparatus for regulating or adjusting the position of endless travelling webs or bands employed in various kinds of machinery." *Letters Patent sealed.*

MCKIMM.
8th November 1867.

3154. ISAAC MCKIMM, of Glasgow, in the County of Lanark, North Britain, Machinist, for an invention for—"An improved apparatus for indicating horizontal, vertical or any angular or inclined line, position or surface."
Provisional protection only.

SMITH.
PETITJEAN.
8th November 1867.

3155. JOSEPH WONTNER SMITH, of 20, Tenter Street, Engineer, and TONY PETITJEAN, of 26, John Street West, Chemist, both in the county of Middlesex, for an invention for—"Improvements in warming, ventilating and heating apparatus." *Provisional protection* NOT *granted.*

JEWITT.
8th November 1867.

3156. HENRY JEWITT, of 141, Leighton Road, Kentish Town, in the County of Middlesex, for an invention for—"A revolving apparatus for exhibiting figures and other objects in apparent motion."—*A communication to him from abroad by William W. Rose, of New York, United States of America.* *Provisional protection only.*

PIGOTT.
8th November 1867.

3157. GEORGE WEST ROYSTON PIGOTT, of Halifax, in the County of York, for an invention for—"Improvements in means and apparatus for covering wire with metal or other material." *Letters Patent sealed.*

LANDELLS.
8th November 1867.

3158. SIBBIT LANDELLS, of 33, High Street, Gateshead, in the County of Durham, for an invention for—"Improvements in the manufacture of glass globes and other hollow forms for gaseliers, chandeliers, candles, lamps and other similar purposes." *Provisional protection only.*

INGLIS.
8th November 1867.

3159. WILLIAM INGLIS, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in shaft couplings."—*A communication to him from abroad by Ebenezer Edwin Gilbert, residing at Montreal, Canada.*
Letters Patent sealed.

NATHAN.
8th November 1867.

3160. PAUL HARDY NATHAN, of the firm of Hardy, Nathan and Sons, of Manchester, in the County of Lancaster, Manufacturers, for an invention for—"Certain improvements in printing or producing patterns or designs on woven fabrics."—*A communication to him from abroad by P. Duguait Dubourg, of Paris, in the Empire of France.* *Provisional protection* NOT *granted.*

WRIGLEY.
8th November 1867.

3161. THOMAS WRIGLEY, of Manchester, in the County of Lancaster, Mechanical Engineer, for an invention for—"Certain improvements in the permanent way of railways." *Provisional protection only.*

KIRBY.
8th November 1867.

3162. SAMUEL AMOS KIRBY, of Bedford, in the County of Bedford, for an invention for—"Improvements in paraffin and other lamps."
Provisional protection only.

CHIPPINDALE.
8th November 1867.

3163. WILLIAM CHIPPINDALE, of Harrogate, in the County of York, for an invention for—"Improvements in apparatus employed in coupling railway carriages."
Letters Patent sealed.

BOUSFIELD.
8th November 1867.

3164. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in machinery for setting types."—*A communication to him from abroad by Joseph Thorne, of the City, County and State of New York, United States of America.*
Complete specification; Letters Patent sealed.

CASTEX.
9th November 1867.

3165. JOHN EDMOND CASTEX, 1, College Place, Camden Town, N.W., for an invention for—"A new or improved combined harmonium and piano."—*A communication to him from abroad by Messrs. Louis Dorgal and Jules Guesne, 26 and 40, Rue du Faubourg du Temple, Paris.* *Provisional protection only.*

HALL.
WHITTINGHAM.
9th November 1867.

3166. SAMUEL HALL, of Birmingham, in the County of Warwick, Brassfounder, and MAURICE WHITTINGHAM, of Wolverhampton, in the County of Stafford, Lock Manufacturer, for an invention for—"Improvements in locks."
Letters Patent sealed.

ELLIS.
9th November 1867.

3167. HENRY ELLIS, of the firm of Bishop, Ellis and Company, of 63, Ludgate Hill, in the County of Middlesex, Umbrella and Parasol Manufacturers, for an invention for—"Improvements in the manufacture of parasols."
Letters Patent sealed.

WILSON.
9th November 1867.

3168. EDWARD BROWN WILSON, of Bolton, in the County of Lancaster, Engineer, for an invention for—"Improvements in furnaces."
Provisional protection only.

GRESHAM.
9th November 1867.

3169. JAMES GRESHAM, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in or applicable to that apparatus known as 'Giffard's injector,' and in the method of and machinery or tools for making the same." *Letters Patent sealed.*

SIMON.
9th November 1867.

3170. SIEGFRIED SIMON, of 29, Falcon Square, London, Leather Merchant, for an invention for—"Improvements in the manufacture of aprons, bibs and pouches, for the use of children and infants."—*A communication to him from abroad by Siegfried Simon, of Berlin, Prussia.* *Letters Patent sealed.*

ROLLASON.
9th November 1867.

3171. MARK ROLLASON, of Birmingham, in the County of Warwick, Modeller, for an invention for—"Improvements in suspended gas lamps."
Letters Patent sealed.

INGRAM.
KEMP.
9th November 1867.

3172. THOMAS WELLS INGRAM, of Birmingham, in the County of Warwick, Manufacturer, and EDWARD CURTIS KEMP, of Birmingham aforesaid, Manufacturer, for an invention for—"Improvements in gas lamps." *Letters Patent sealed.*

BEDELLS.
9th November 1867.

3173. CALEB BEDELLS, of Leicester, for an invention for—"Improvements in the manufacture of elastic fabrics, part of which invention is especially applicable to the production of shaped slipper fronts and similar articles." *Letters Patent sealed.*

FARREN. 9th November 1867.

3174. GEORGE FARREN, of 18, Whitehead's Grove, Brompton, in the County of Middlesex, C.E., for an invention for—"Improvements in apparatus for taking and registering votes in deliberative assemblies." *Provisional protection only.*

PARRATT. 9th November 1867.

3175. GEORGE FREDERICK PARRATT, of Her Majesty's Treasury, Whitehall, for an invention for—"Improvements in the manufacture of flexible air-tight cylinders or cases to be used as pontoons and in forming rafts." *Provisional protection only.*

LAWRIE. 9th November 1867.

3176. WILLIAM LAWRIE, of the Norfolk Chemical Works, Great Yarmouth, in the County of Norfolk, for an invention for—"Improvements in apparatus for burning mineral oils or other hydrocarbons to obtain heat therefrom." *Provisional protection only.*

BIGGS. BIGGS. 9th November 1867.

3177. JOHN HOWARD WORTHINGTON BIGGS, of Manchester, and ARTHUR WORTHINGTON BIGGS, of Brown's Buildings, Liverpool, for an invention for—"Improvements in joining warp ends and in apparatus employed therein." *Letters Patent sealed.*

THOMPSON. 11th November 1867.

3178. WILLIAM THOMPSON, of No. 85, Lower Gardner Street, in the City of Dublin, and of Clare Hall, in the County of Dublin, Ireland, for an invention for—"Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, parts of which improvements are also applicable to railway and other carriages." *Letters Patent sealed.*

PAYNE. 11th November 1867.

3179. WILLIAM PAYNE, of Birmingham, in the County of Warwick, Engine Fitter, for an invention for—"Improvements in clack and bucket door pieces for pumps." *Letters Patent sealed.*

HODGETTS. 11th November 1867.

3180. CHARLES BLAKEMORE HODGETTS, of Corngreaves, near Cradley Heath, in the County of Stafford, Blast Furnace Manager, for an invention for—"Improvements in tuyeres for blast furnaces." *Letters Patent sealed.*

BUXTON. GARDAM. 11th November 1867.

3181. SAMUEL BUXTON, and WILLIAM GARDAM, both of Leeds, in the County of York, for an invention for—"Improvements in the construction of safety lamps for mines." *Letters Patent sealed*

ELLIS. JACOBSON. 11th November 1867.

3182. GEORGE ELLIS, of 19, Bolton Road, St. John's Wood, Gentleman, and MARK JACOBSON, of 18, Church Street, Spitalfields, Fur Merchant and Manufacturer, for an invention for—"Improvements in various articles of furniture, for the purpose of adapting them to additional useful purposes."—*Partly a communication to Mark Jacobson from abroad by Frederick Wasielewski, of Frankfort-on-the-Oder, and partly the invention of the said George Ellis.* *Provisional protection only.*

BROOMAN. 11th November 1867.

3183. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in apparatus for burning and distilling petroleum and other oils to generate steam and for other purposes."—*A communication to him from abroad by Adam Robertson and Ananias Smith, both of Guelph, Province of Ontario, Canada.* *Provisional protection only.*

LEONARD. 11th November 1867.

3184. THOMAS JONES LEONARD, of Castlefield, Stockton-on-Tees, in the County of Durham, Roll Turner, for an invention for—"Improved machinery for rolling iron into bars, strips and sheets." *Provisional protection only.*

LAKE. 11th November 1867.

3185. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in defensive armour for war vessels and forts."—*A communication to him from abroad by Obadiah Marland, of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

LAKE. 11th November 1867.

3186. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in cylinder printing machines, more especially designed for producing coloured patterns upon textile fabrics and paper hangings."—*A communication to him from abroad by George Henry Babcock, Joseph Potter Manton and Jonathan Boyd, all of Providence, Rhode Island, United States of America.* *Letters Patent sealed.*

LAKE.
11th November 1867.

3187. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in cartridges for breech-loading fire-arms."—*A communication to him from abroad by John Webster Cochran, of the City and State of New York, United States of America.* *Letters Patent sealed.*

LAKE.
11th November 1867.

3188. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for —"An improved caster for tables, chairs and other articles of furniture."—*A communication to him from abroad by Edward Ward Wilder and Simon Gardner Cheever, both of Boston, Massachusetts, United States of America.* *Provisional protection only.*

LAKE.
11th November 1867.

3189. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by John Webster Cochran, of the City and State of New York, United States of America.* *Letters Patent sealed.*

CAMPION.
CAMPION.
11th November 1867.

3190. WILLIAM CAMPION, of the Town and County of the Town of Nottingham, Sewing-Machine Manufacturer, and WILLIAM CAMPION, of Sneinton, in the County of Nottingham, Mechanic, for an invention for—"Improvements in knitting machinery." *Letters Patent sealed.*

DE GERBETH.
11th November 1867.

3191. FRANCIS LOUIS DE GERBETH, of Hope Wharf, Haggerstone, in the County of Middlesex, for an invention for—"Improvements in treating oils and spirits, and in apparatus to be used for this purpose." *Letters Patent sealed.*

BOUSFIELD.
11th November 1867.

3192. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in machines for sewing the seams of looped fabrics."—*A communication to him from abroad by Edward Elisha Kilbourn, a person resident at New Brunswick, in the State of New Jersey, United States of America.* *Complete specification; Letters Patent sealed.*

RANSOME.
BESSEMER.
RANSOME.
11th November 1867.

3193. FREDERICK RANSOME, of Queen Street Place, HENRY BESSEMER, also of Queen Street Place, both in the City of London, and ERNEST LESLIE RANSOME, of Greenwich, in the County of Kent, for an invention for—"Improvements in the manufacture of grindstones and other blocks or forms of artificial stone." *Letters Patent sealed.*

BAYLEY.
CAMPBELL.
12th November 1867.

3194. JOHN CLOWES BAYLEY, and DANIEL CAMPBELL, of 10, John Street, Adelphi, in the County of Middlesex, Engineers, for an invention for—"Improvements in fire lighters and fire revivers." *Letters Patent sealed.*

BONNEVILLE.
12th November 1867.

3195. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"New and useful improvements in lubricating boxes."—*A communication from Isaac Pennington Wendell, a person resident at Philadelphia, in the State of Pennsylvania, United States of America.* *Letters Patent sealed.*

BONNEVILLE.
12th November 1867.

3196. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"Improvements in machines for pressing or moulding bricks, tiles or other blocks."—*A communication from John North, a person resident at New York City, in the State of New York, United States of America.* *Letters Patent sealed.*

FAUCHEUX.
12th November 1867.

3197. RAOUL PAUL FAUCHEUX, of Paris, in the Empire of France, but at present residing at Caversham Road, Kentish Town, in the County of Middlesex, for an invention for—"Improvements in tobacco pouches, purses, cigar cases and bags of various kinds." *Provisional protection only.*

CRISPIN.
12th November 1867.

3198. WILLIAM HENRY CRISPIN, of Marsh Gate Lane, Stratford, in the County of Essex, for an invention for—"Improvements in the manufacture of artificial fuel." *Provisional protection only.*

PORTER.
12th November 1867.

3199. JOHN THOMAS BROWN PORTER, of Lincoln, Engineer, for an invention for—"Improvements in rotary spaders or digging machines for tilling land." *Provisional protection only.*

BROOMAN. 12th November 1867.

3200. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in furnaces or heating apparatus."—*A communication to him from abroad by Eugene Alexandre Frederic Goguel, of St. Etienne, France.* *Provisional protection only.*

EVANS. 12th November 1867.

3201. THOMAS EVANS, of Walsall, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of certain descriptions of buckles." *Provisional protection only.*

WESTHEAD. SMITH. 12th November 1867.

3202. MARCUS BROWN WESTHEAD, of Manchester, in the County of Lancaster, Merchant, and ROBERT SMITH, of the same place, Manager, for an invention for—"Improvements in arranging tapes or other narrow fabrics in boxes or other receptacles for use." *Letters Patent sealed.*

MCKENZIE. 12th November 1867.

3203. ALEXANDER MCKENZIE, of Grosvenor Mews, New Bond Street, in the County of Middlesex, Coach Builder, for an invention for—"An improved apparatus for opening and closing the heads of landaus, barouches and other open carriages." *Provisional protection only.*

BADIN. 12th November 1867.

3204. LÉOS ANTOINE BADIN, of Paris, France, Gentleman, for an invention for—"Improvements in bungs for casks, tuns or other similar vessels for containing liquids." *Provisional protection only.*

HUMBY. 12th November 1867.

3205. JAMES HUMBY, of South Castle Street, Liverpool, in the County of Lancaster, for an invention for—"Improvements in the manufacture of compound metallic plates." *Provisional protection only.*

CARTER. CHALMERS. 12th November 1867.

3206. JAMES CARTER, and THOMAS CHALMERS, both of Dunfermline, in the County of Fife, North Britain, for an invention for—"Improvements in the details and fittings of windows, doors and other similar contrivances applied to buildings and other structures." *Letters Patent sealed.*

SCALLY. 12th November 1867.

3207. JOHN DILLON SCALLY, of Moor Street, Burton-on-Trent, for an invention for—"Improvements in treating casks to render them impervious." *Letters Patent sealed.*

GAIDAN. 13th November 1867.

3208. AUGUSTE FRANÇOIS GAIDAN, of Nimes, Gard, in the Empire of France, but at present residing at No. 6, Lancaster Terrace, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in compressed or artificial fuel."—*The result partly of a communication made to him from abroad by Louis Tresgot, of Nimes, Gard, in the Empire of France, and partly of an invention and discovery made by himself.* *Letters Patent sealed.*

LOWTHER. BENNETT. 13th November 1867.

3209. JOSEPH WILSON LOWTHER, of the City of Manchester, in the County of Lancaster, Manufacturer, and THOMAS BENNETT, of the same place, Brass Founder, for an invention for—"Improvements in safety lamps." *Provisional protection only.*

ANDREW. WHITTAKER. 13th November 1867.

3210. FREDERICK ANDREW, of Harpurhey, near Manchester, in the County of Lancaster, Dyer and Printer, and ELLIS WHITTAKER, of the same place, Foreman, for an invention for—"Improvements in printing rollers used for printing colours on hanks of yarns or threads." *Letters Patent sealed.*

WILSON. 13th November 1867.

3211. THOMAS WILSON, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in the construction of breech-loading fire-arms, and in the manufacture and construction of cartridges for breech-loading fire-arms." *Letters Patent sealed.*

CLARK. 13th November 1867.

3212. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in tubular boilers."—*A communication to him from abroad by Louis Barret, Dock Engineer, Marseilles, and of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

TAYLOR. 13th November 1867.

3213. THOMAS TAYLOR, of No. 7, Wellington Row, Bethnal Green, in the County of Middlesex, for an invention for—"New or improved implements or apparatus for playing games of skill and chance." *Provisional protection only.*

LAKE.
13th November 1867.

3214. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in breech-loading fire-arms."—*A communication to him from abroad by Samuel Norris, of Springfield, Massachusetts, United States of America.* *Letters Patent sealed.*

PERRENOUD-WÜRFLEIN.
13th November 1867.

3215. ULYSSE PERRENOUD-WÜRFLEIN, of 235c, Rue Christophe, Berne, Switzerland, for an invention for—"Improvements in instruments for joining blind cords and other cords." *Letters Patent sealed.*

ADAMS.
13th November 1867.

3216. ROBERT ADAMS, of Forest Hill, in the County of Surrey, Gun Maker, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

MADGE.
13th November 1867.

3217. EDWARD MADGE, of Swansea, in the County of Glamorgan, Gentleman for an invention for—"Improvements in the mode of and apparatus for the reduction of sulphate of iron crystals."—*The result partly of a communication from abroad made to him by Charles Madge, of Carrizal Bajo, in the Republic of Chili, and partly of invention and discovery made by him.* *Letters Patent sealed.*

MADGE.
13th November 1867.

3218. EDWARD MADGE, of Swansea, in the County of Glamorgan, Gentleman, for an invention for—"Improved apparatus for feeding metal plates to rolls." *Letters Patent sealed.*

NEWTON.
13th November 1867

3219. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes."—*A communication to him from abroad by Arthur Perry Emery, of the City and State of New York, United States of America.* *Letters Patent sealed.*

BLAND.
13th November 1867.

3220. PETER EDWARD BLAND, of the City and County of St. Louis, in the State of Missouri and United States of America, Civil Engineer, for an invention for —"New and useful machinery for making, drying and burning bricks and tiles, applicable in part to baking pottery ware." *Complete specification; Letters Patent sealed.*

FAIRLIE.
14th November 1867.

3221. ROBERT FRANCIS FAIRLIE, of Gracechurch Street, in the City of London, Engineer, for an invention for—"Improvements in the construction of locomotive engines for mountain rail or tramways." *Letters Patent sealed.*

MORRISON.
14th November 1867.

3222. JOHN MORRISON, of Birmingham, in the County of Warwick, Machinist, for an invention for—"Improvements in hem folders and tuckers for sewing-machines." *Letters Patent sealed.*

DE BAVAY.
14th November 1867.

3223. PAUL DE BAVAY, Ironmaster, of the City of Brussels, in the Kingdom of Belgium, for an invention for—"A method of attenuating the effect of shocks or concussions between engines, carriages or waggons composing a railway train." *Letters Patent sealed.*

KENT.
14th November 1867.

3224. GEORGE KENT, of Holborn, in the County of Middlesex, for an invention for—"Improvements in kneading machines."—*A communication to him from abroad by George King, a person resident at 93, 6th Avenue, New York, United States of America.* *Letters Patent sealed.*

HARRISON.
14th November 1867.

3225. RICHARD HARRISON, of 7, Sackville Place, in the City of Dublin, Brass Founder, for an invention for—"Improvements in cocks or taps." *Letters Patent sealed.*

RICHARDSON.
14th November 1867.

3226. WILLIAM HADEN RICHARDSON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Certain improvements in the manufacture of iron and steel, and in the means or apparatus for effecting the same." *Letters Patent sealed.*

COMBE.
14th November 1867.

3227. JAMES COMBE, of Belfast, in the County of Antrim and Kingdom of Ireland, for an invention for—"An improved arrangement of machinery for making cops." *Letters Patent sealed.*

WAINMAN.
14th November 1867.

3228. LEVI ALFRED WAINMAN, of Leeds, in the County of York, Engineer, for an invention for—"Improved apparatus for raising water." *Letters Patent sealed.*

CLARK.
14th November 1867.

3229. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in apparatus for applying bronze and other powders on paper and other surfaces."—*A communication to him from abroad by Jacques Laurent Poirier, Mechanical Engineer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

HECKMANS.
NUNNEY.
14th November 1867.

3230. JEAN PIERRE LEOPOLD HECKMANS, Contractor, and FREDERICK JAMES NUNNEY, Plasterer, both of Harrow Road, in the County of Middlesex, for an invention for—"Improvements in washing machines." *Provisional protection only.*

LAKE.
14th November 1867.

3231. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in steering apparatus."—*A communication to him from abroad by Henry Franklin Shaw, of West Roxbury, Massachusetts, United States of America.* *Letters Patent sealed.*

CLARK.
ESILMAN.
14th November 1867.

3232. JOHN CLARK, Doctor of Philosophy, and ALEXANDER ESILMAN, Chemist, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in decomposing the sulphides of copper, silver, nickel, cobalt, lead, barium, strontium and calcium, and in obtaining copper, sulphur and other products." *Provisional protection only.*

HARCOURT.
15th November 1867.

3233. RICHARD GREEN HARCOURT, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture and composition of fire-lighting material." *Provisional protection only.*

PARSONS.
15th November 1867.

3234. PERCEVAL MOSES PARSONS, of Blackheath, in the County of Kent, Civil Engineer, for an invention for—"Improvements in the manufacture of artificial granite suitable for buildings, engineering structures, pavements and other similar purposes."—*A communication to him from abroad by Pierre Rudolph Pozzi, of Bordeaux, France.* *Letters Patent sealed.*

SOLOMON.
BEBRO.
15th November 1867.

3235. GEORGE RODOLPH SOLOMON, junior, of Manchester, in the County of Lancaster, and MARCUS BEBRO, of the same place, Merchants, for an invention for—"Improvements applicable to apparatus employed as a ticket register." *Letters Patent sealed.*

CROSSLEY.
15th November 1867.

3236. JAMES CROSSLEY, of Heckmondwike, in the County of York, Manager to "The Heckmondwike Iron Works Company, Limited," for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

GEDGE.
15th November 1867.

3237. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved gas engine."—*A communication to him from abroad by Jean Mazières and Jules Trottier, Engineers, both of No. 39, Faubourg St. Martin, Paris, France.* *Provisional protection only.*

AIRIAU.
15th November 1867.

3238. ATHANASE AIRIAU, of Paris, Department of Seine, in the Empire of France, Gentleman, for an invention for—"An hydraulic clock." *Letters Patent sealed.*

MORSON.
15th November 1867.

3239. ROBERT MORSON, of Queen Square, Bloomsbury, in the County of Middlesex, for an invention for—"Improvements in keys for locks." *Provisional protection only.*

BERTRAM.
15th November 1867.

3240. LEOPOLD BERAL BERTRAM, of Duncan Villa, Redland, in the County of Gloucester, for an invention for—"An improved tobacco pipe." *Letters Patent sealed.*

FARRINGTON.
15th November 1867.

3241. ERNEST FARRINGTON, of No. 28, Rue du Chemin Vert, in the City of Paris, Engineer, for an invention for—"An improved tubular cannon." *Provisional protection only.*

ADDY.
15th November 1867.

3242. ROBERT CHARLES ADDY, of Belfast, in the County of Antrim, in Ireland, Flax Mill Manager, for an invention for—"Improvements in the flyers of spinning and twisting frames." *Provisional protection only.*

CLARK.
15th November 1867.

3243. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in refining copper."—*A communication to him from abroad by Frederic Le Clerc, Doctor of Medicine, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

TEMPLEMAN. 15th November 1867.

3244. JAMES TEMPLEMAN, of the City of Glasgow, in the County of Lanark, North Britain, Artificial Fuel Manufacturer, for an invention for—"Improvements in the manufacture of fire-lighters, applicable also for temporary fires or heaters, and in the means or apparatus employed therein." *Letters Patent sealed.*

HOWSON. 15th November 1867.

3245. RICHARD HOWSON, of Middlesbro'-on-Tees, in the County of York, Engineer, for an invention for—"An improved gas furnace." *Letters Patent sealed.*

HEATHFIELD. 15th November 1867.

3246. RICHARD HEATHFIELD, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in machinery for the manufacture of cut nails."—*A communication to him from abroad by Cyrus Dexter Hunt, of Fairhaven, Massachusetts, United States of America.* *Letters Patent sealed.*

BONNEVILLE. 16th November 1867.

3247. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in apparatus for propelling vessels."—*A communication from Edouard Maitre, a person resident at Veuxaulles, in the Empire of France aforesaid, Gentleman.* *Provisional protection only.*

SWINDELLS. 16th November 1867.

3248. ISRAEL SWINDELLS, of Kegworth, in the County of Leicestershire, Chemist, for an invention for—"Improvements in the process of and in apparatus employed in treating and separating minerals, earths and other substances, when ground or pulverized." *Letters Patent sealed; no specification filed.*

HOLLIDAY. 16th November 1867.

3249. READ HOLLIDAY, of Huddersfield, in the County of York, Manufacturing Chemist, for an invention for—"Improvements in cleansing wool and other similar animal fibres." *Letters Patent sealed.*

BROOMAN. 16th November 1867.

3250. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in ornamenting bottles and other articles of glass or crystal."—*A communication to him from abroad by Charles Julien Aubertin, of 23, Boulevard de Strasbourg, Paris, France.* *Letters Patent sealed.*

GARBETT. 16th November 1867.

3251. RICHARD GARBETT, of Walsall, in the County of Stafford, Wine Merchant, for an invention for—"Improvements in the construction of the parts, apparatus or materials of certain games, by which improvements such games are adapted to be played in ordinary rooms." *Letters Patent sealed.*

NEWTON. 16th November 1867.

3252. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in manufacturing and securing envelopes."—*A communication to him from abroad by Sigmund Ullman, of the City and State of New York, United States of America.* *Provisional protection only.*

RUSSELL. 16th November 1867.

3253. FREDERICK WILLIAM RUSSELL, of Stoke Newington, in the County of Middlesex, Gentleman, for an invention for—"Improvements in cask stands." *Provisional protection only.*

RITCHIE. 16th November 1867.

3254. CHARLES RITCHIE, of Upper Tulse Hill, Brixton, in the County of Surrey, for an invention for—"Improvements in apparatus for brushing, combing, cleansing, drying and perfuming hair." *Provisional protection only.*

PEARSE. 16th November 1867.

3255. ROBERT WILLIAM PEARSE, of Lewisham Road, Greenwich, in the County of Kent, for an invention for—"Improvements in the means of and apparatus for developing or extending the power or sound of pianofortes or other similar keyed instruments." *Letters Patent sealed.*

RICHTER. 16th November 1867.

3256. JOHN ERNEST RICHTER, of Kenton Street, Brunswick Square, in the County of Middlesex, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

NAPIER. 16th November 1867.

3257. JAMES MURDOCH NAPIER, of York Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in machines for printing calico and other fabrics." *Letters Patent sealed.*

LAKE.
16th November 1867.

3258. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum."—*A communication to him from abroad by Andrew Albright, of Dryden, in the State of New York, United States of America.*
Letters Patent sealed.

BAILEY.
16th November 1867.

3259. WILLIAM BAILEY, Manufacturer of Paper Hangings, in the City of New York, U.S. of America, for an invention for—"An improved system or mode of ornamenting paper hangings, and machinery and apparatus therefor."
Provisional protection only.

TONGUE.
16th November 1867.

3260. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the process and apparatus employed for ageing and refining wines, alcoholic spirits and other liquors."—*A communication to him from abroad by Reuben Daniel Turner, of the City, County and State of New York, United States of America.* *Letters Patent sealed.*

BRIERLEY.
BRIERLEY.
BONNELL.
18th November 1867.

3261. LAW BRIERLEY, WALTER BRIERLEY, and JOHN BONNELL, of the firm of "Brierley and Co.," Waggon Builders, of Warrington, in the County of Lancaster, for an invention for—"Certain improvements in the construction of waggons and other carriages employed on railways or tramways." *Provisional protection only.*

HUSBAND.
18th November 1867.

3262. RICHARD HUSBAND, of the City of Manchester, in the County of Lancaster, Hat Manufacturer, for an invention for—"Certain improvements in the manufacture of hats." *Letters Patent sealed.*

LORD.
18th November 1867.

3263. EDWARD LORD, of Todmorden, in the County of York, Machine Maker, for an invention for—"Improvements in machinery for opening and cleaning cotton and other fibrous substances." *Letters Patent sealed.*

BROOMAN.
18th November 1867.

3264. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"A new or improved process of and apparatus or furnaces for the manufacture of metal direct from the ore."—*A communication to him from abroad by Pierre Emile Martin, of Paris, France.* *Letters Patent sealed.*

HUGHES.
18th November 1867.

3265. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in knitting machines."—*A communication to him from abroad by Samuel Larkin, of New Haven, Connecticut, United States of America.* *Letters Patent sealed.*

BUSFIELD.
BUSFIELD.
BUSFIELD.
18th November 1867.

3266. WILLIAM BUSFIELD, JOHN BUSFIELD, and JOSEPH BUSFIELD, of Bradford, in the County of York, Worsted Spinners, for an invention for—"Improvements in preparing slivers of wool for spinning and dyeing." *Letters Patent sealed.*

HANSON.
ELLISON.
18th November 1867.

3267. WILLIAM JAMES HANSON, and JAMES CHARLES ELLISON, of Rawfolds, Cleckheaton, in the County of York, Dyers, Printers and Stovers, for an invention for—"An improved method of and means or apparatus for dyeing textile fabrics, yarns and fibrous substances." *Provisional protection only.*

THORNTON.
ABERCROMBIE.
18th November 1867.

3268. JOHN VARLEY THORNTON, and CHARLES ABERCROMBIE, of Brighouse, in the County of York, Worsted Spinners and Manufacturers, for an invention for—"Improvements in machinery for twisting yarns of two or more colours and kinds, commonly called 'French twist' or 'Knotted yarn.'" *Provisional protection only.*

COLEBROOK.
18th November 1867.

3269. JOHN COLEBROOK, of Queen's Terrace, Saint John's Wood, in the County of Middlesex, for an invention for—"A new or improved butter basket."
Provisional protection only.

FITT.
18th November 1867.

3270. GEORGE FITT, of Copenhagen Wharf, Limehouse, in the County of Middlesex, for an invention for—"Improvements in the manufacture of artificial manure."
Letters Patent sealed.

WINSLOW.
18th November 1867.

3271. KENELM JOHN WINSLOW, of Montpelier Row, Twickenham, in the County of Middlesex, Civil Engineer, for an invention for—"An improved method of conveying rotatory motion to axles." *Complete specification; Letters Patent sealed.*

WOOD.
18th November 1867.

3272. THOMAS WOOD, of Bridge Street, in the City of Chester, Ironmonger, for an invention for—"Improvements in the construction of lamps for burning paraffin, petroleum or other mineral oils." *Letters Patent sealed.*

WARD.
TRAVIS.
19th November 1867.

3273. ROBERT WARD, of the City of Manchester, Manufacturer, and THOMAS TRAVIS, of Royton, in the County of Lancaster, Manufacturer, for an invention for —"Improvements in the manufacture of woven fabrics." *Letters Patent sealed.*

REYNOLDS.
19th November 1867.

3274. EDWARD REYNOLDS, of The River Don Works, Sheffield, in the County of York, for an invention for—"Improvements in the manufacture of wheels for railway carriages and other rolling stock." *Provisional protection only.*

COLEMAN.
COLEMAN.
19th November 1867.

3275. WILLIAM JUBY COLEMAN, of Bury St. Edmonds, in the County of Suffolk, and ALFRED COLEMAN, of Lombard Street, in the City of London, for an invention for—"Improvements in the combination and mode of treating and employing certain preparations for various articles of food." *Letters Patent sealed.*

ENGLISH.
FARNDON.
19th November 1867.

3276. HENRY ENGLISH, and JOHN FARNDON, both of the Town and County of Leicester, Machinists, for an invention for—"Improvements in apparatus for operating the shuttles of looms for weaving narrow fabrics." *Provisional protection only.*

ANDERSON.
19th November 1867.

3277. WILLIAM ANDERSON, of Erith, in the County of Kent, Engineer, for an invention for—"Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus." *Letters Patent sealed.*

SCOTT.
19th November 1867.

3278. ROBERT ANTHONY EDWARD SCOTT, of Hornsey Lane, in the County of Middlesex, Captain in the Royal Navy, for an invention for—"Improvements in mounting and working ordnance." *Letters Patent sealed.*

BARCLAY.
19th November 1867.

3279. ANDREW BARCLAY, of Kilmarnock, in the County of Ayr, North Britain, for an invention for—"Improvements in motive-power engines." *Letters Patent sealed.*

TRENERY.
19th November 1867.

3280. EDWARD TREVYTHAN TRENERY, of Gainsborough, in the County of Lincoln, Railway Contractor, for an invention for—"Improvements in traction engines." *Provisional protection only.*

MOLE.
20th November 1867.

3281. CHARLES MOLE, of Farringdon Road, in the City of London, Bootmaker, for an invention for—"Improvements in the manufacture of soles and heels for boots and shoes. *Letters Patent sealed.*

RICHARDSON.
20th November 1867.

3282. WILLIAM HADEN RICHARDSON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Certain improvements in the manufacture of iron and steel." *Letters Patent sealed.*

COULSON.
20th November 1867.

3283. SAMUEL COULSON, of Montague Street, Sheffield, Merchant, for an invention for—"Improvements in the manufacture of coffins." *Provisional protection only.*

LLOYD.
20th November 1867.

3284. HUGH HUGHES LLOYD, of Fort William, Douglas, Isle of Man, Colonel, late of the Bengal Army, for an invention for—"Improvements in means of communication applied to railway carriages and in apparatus for making signals, which improvements are in part applicable to other purposes." *Letters Patent sealed; no specification filed.*

TILLEY.
20th November 1867.

3285. THOMAS HENRY TILLEY, of Queen Street, Cheapside, in the City of London, Engineer, for an invention for—"Improvements in couplings for boring tools." *Letters Patent sealed.*

OPPENHEIMER.
20th November 1867.

3286. JOSEPH OPPENHEIMER, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in telegraph posts and in apparatus for fixing the same." *Letters Patent sealed.*

GREENE.
20th November 1867.

3287. HENRY GREENE, of King William Street, in the City of London, Lamp Manufacturer, for an invention for—"An improved safety lamp suitable for reading and night purposes." *Letters Patent sealed.*

DE LAVENANT.
20th November 1867.

3288. Baroness CAMILLE DE LAVENANT, of Brixton Road, in the County of Surrey, for an invention for —"Improvements in coating metals and metallic articles for the purpose of protecting or preserving the same from oxidation and decay, also in the materials, machinery and apparatus to be employed therein." *Letters Patent sealed.*

STAINCLIFFE.
20th November 1867.

3289. JOSEPH STAINCLIFFE, of Lane Ends, near Keighley, in the County of York, for an invention for—"Improvements in smoke-consuming apparatus, parts of which improvements are applicable to other purposes." *Provisional protection only.*

BREWSTER. 20th November 1867.

3290. WILLIAM BREWSTER, of Redditch, in the County of Worcester, Needle Manufacturer, for an invention for —"Improvements in apparatus for boiling, washing or cleansing and dyeing clothes and fabrics, and for other like purposes."—*A communication to him from abroad by James Brown, of New York, in the United States of America.* *Letters Patent sealed.*

JOSEPH. 20th November 1867.

3291. LIONEL BARNET JOSEPH, of Wyattville, Central Hill, Upper Norwood, in the County of Surrey, for an invention for—"Improvements in tramways for common roads." *Letters Patent sealed.*

OWENS. 21st November 1867.

3292. JOHN OWENS, of Salford, in the County of Lancaster, Machinist, for an invention for—"Improvements in the manufacture of pile and other fabrics." *Letters Patent sealed.*

LAKE. 21st November 1867.

3293. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in packing for the piston heads of steam cylinders."—*A communication to him from abroad by Horace McMurtrie, of the firm of Horace McMurtrie and Co., of Boston, Massachusetts, United States of America.* *Letters Patent sealed.*

REDFERN. 21st November 1867.

3294. GEORGE FREDERICK REDFERN, of the General Patent Office, 4, South Street, Finsbury, in the County of Middlesex, Mechanical Draughtsman, for an invention for —"Improvements in paving."—*A communication to him from abroad by Louis Alexandre Auguste Le Poreq D'Herlon, of Boulogne--sur-Mer, in the Empire of France.* *Provisional protection only.*

TOWNSEND. 21st November 1867.

3295. JOSEPH TOWNSEND, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of soda and potash." *Letters Patent sealed.*

BUTLER. 21st November 1867.

3296. CEPHAS BUTLER, of the firm of Wright and Butler, of Birmingham, in the County of Warwick, Paraffin Lamp Manufacturers, for an invention for—"Improvements in lamps for burning liquid volatile hydrocarbons." *Provisional protection only.*

BARCZINSKY. BARCZINSKY. 21st November 1867.

3297. SAMUEL BARCZINSKY, and BERNHARD BARCZINSKY, both of Northfleet, in the County of Kent, for an invention for—"Improved means of producing illusory exhibitions."—*A communication to them from abroad by Fredk. Aschenbach, of Philadelphia, U.S. of America.* *Provisional protection only.*

WATSON. 21st November 1867.

3298. JOHN FORREST WATSON, of 62, St. John's Square, Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in the escapement of watches and other timekeepers." *Provisional protection only.*

GREEN. FREEMAN. 21st November 1867.

3299. WILLIAM ROBERT GREEN, of Peckham, in the County of Surrey, and JOHN GEORGE FREEMAN, of Newington, in the same County, Engineers, for an invention for—"Improvements in steam and other motive-power engines, and in valves for engines." *Letters Patent sealed.*

BLUNDELL. 21st November 1867.

3300. WALTER BLUNDELL, of Maddox Street, in the County of Middlesex, for an invention for—"Improvements in cowls or guards for chimney and other like shafts." *Letters Patent sealed.*

MURPHY. 21st November 1867.

3301. WILLIAM JEREMIAH MURPHY, of Cork, in the County of the City of Cork, Ireland, for an invention for—"Improvements in breech-loading fire-arms and cartridges." *Complete specification; Letters Patent sealed.*

McIVOR. 21st November 1867.

3302. WILLIAM GRAHAM McIVOR, Superintendent of the Government Botanical Gardens and Chinchona Plantations, Ootacamund, Madras, East Indies, now residing at Anfield, near Liverpool, in the County of Lancaster, for an invention for—"Improvements in apparatus for rendering innocuous the momentum of heavy bodies, so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes." *Complete specification; Letters Patent sealed.*

THOROLD.
21st November 1867.

3303. ERNEST THOROLD, of Lee, in the County of Kent, Engineer, for an invention for—"Improvements in lamps for burning petroleum and other volatile oils or essences." *Provisional protection only.*

HUGHES.
21st November 1867.

3304. EBENEZER WILLIAM HUGHES, of Queen Square, Westminster, for an invention for—"Improvements in rotary engines and pumps." *Provisional protection only.*

JAMES.
DREWETT.
21st November 1867.

3305. HENRY JAMES, and EDWARD DREWETT, of Weybridge, in the County of Surrey, for an invention for—Improvements in waterclosets." *Letters Patent sealed.*

LEIGHTON.
KIRKHAM.
22nd November 1867.

3306. ROBERT LEIGHTON, of No. 13, Shoe Lane, in the City of London, Bookbinder, and THOMAS KIRKHAM, of Cambridge Villa, Gilston Road, West Brompton, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the method of sewing sheets of paper, forming books and pamphlets, and in machinery for effecting the same." *Letters Patent sealed.*

BURCHELL.
22nd November 1867.

3307. VALENTINE BURCHELL, of 1, Claremont Avenue, Kingstown, County Dublin, Ireland, Manager of the Hibernian Mineral Water Company, for an invention for—"A new and improved process and machinery for the manufacture of soda-water and other aërated liquids." *Provisional protection only.*

WORMALD.
DALTON.
22nd November 1867.

3308. JOHN WORMALD, of Roundell Street, in the County of Surrey, Gunmaker, and WILLIAM BELL DALTON, of Windmill Street, in the County of Middlesex, Gun Implement Maker, for an invention for—"An improved apparatus by which central-fire breech-loading fire-arms may be converted into muzzle-loaders at pleasure, and which also forms an indestructible cartridge case." *Provisional protection only.*

TONGUE.
22nd November 1867.

3309. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in gibs applicable to the cross heads and other parts of engines and other machinery, also in the means employed for lubricating the same and other sliding or frictional surfaces."—*A communication to him from abroad by William Armstrong Devon, of Port Richmond, Staten Island, in the County of Queen's and State of New York, United States of America.* *Provisional protection only.*

DOLBY.
22nd November 1867.

3310. THOMAS GEORGE FONNEREAU DOLBY, Manufacturing Goldsmith, 14, Old Town, Clapham Parish, in the County of Surrey, for an invention for—"Improvements in the method of and apparatus for warming and heating solid and liquid food for children and invalids." *Letters Patent sealed and specification filed by order.*

MUNRO.
22nd November 1867.

3311. ARCHIBALD MUNRO, of Arbroath, in the County of Forfar, North Britain, Engineer, for an invention for—"An improved tool to be used for cutting rocks or stone and other similar substances."

WELCH.
22nd November 1867.

3312. GEORGE WELCH, of Dundee, in the County of Forfar, North Britain, Ship Agent, for an invention for—"An improved mode of and apparatus or means for killing whales." *Letters Patent sealed.*

BROWN.
22nd November 1867.

3313. JOHN HARCOURT BROWN, of Exeter Hotel, Strand, in the County of Middlesex, Gentleman, for an invention for—"A new game to be played with balls and cues or other media for propelling the said balls, and also for the peculiar construction of the table on which the same is played, together with the several mechanical appliances and figures." *Provisional protection only.*

HUGHES.
23rd November 1867.

3314. GEORGE DOUGLAS HUGHES, of Nottingham, in the County of Nottingham, for an invention for—"Improvements in the means of and apparatus for consuming smoke and economizing fuel in furnaces of steam-boilers and other furnaces." *Letters Patent sealed.*

NEEDHAM.
KITE.
23rd November 1867.

3315. WILLIAM NEEDHAM, and JAMES KITE, both of Vauxhall, in the County of Surrey, Engineers, for an invention for—"Improvements in apparatus for depurating or changing the condition of fluids in process of decantation." *Provisional protection only.*

BOLTON.
WHITTHREAD.
BOLTON.
ROBINSON.
23rd November 1867.

3316. GEORGE HARRISON BOLTON, WILLIAM WHITTHREAD, and EDWARD BOLTON, all of Widnes, in the County of Lancaster, and THOMAS ROBINSON, of St. Helens, in the said County, for an invention for—"Improvements in obtaining motive-power and in apparatus employed therein." *Provisional protection only.*

HUGHES.
23rd November 1867.

3317. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in telegraphic apparatus."—*A communication to him from abroad by John Murray Fairchild and Joseph Kidder Bundy, of the City and County of New Haven, State of Connecticut, United States of America.* *Provisional protection only.*

SALMON.
23rd November 1867.

3318. PETER SALMON, of No. 6, Great Smith Street, Westminster, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of gas and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes." *Letters Patent sealed.*

BOULTON.
23rd November 1867.

3319. WILLIAM BOULTON, of Providence Foundry, Burslem, in the County of Stafford, Engineer and Ironfounder, for an invention for —"An improved method of transmitting motive-power to potters' wheels, lathes, jiggers and other similar machinery for the manufacture of pottery and other articles made from clay." *Letters Patent sealed.*

MACNAB.
23rd November 1867.

3320. WILLIAM MACNAB, of Greenock, in the County of Renfrew, North Britain, Engineer and Shipbuilder, for an invention for —"Improvements in marine steam-engines." *Letters Patent sealed.*

BROOMAN.
23rd November 1867.

3321. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in steam generators."—*A communication to him from abroad by Pierre Joseph Guyet, of Paris, France.* *Letters Patent sealed.*

AMPHLET.
FENBY.
23rd November 1867.

3322. SAMUEL AMPHLET, of Birmingham, in the County of Warwick, Manufacturer, and JOSEPH BEVERLEY FENBY, of Birmingham aforesaid, Mechanical Engineer, for an invention for—"Improvements in machinery for ruling ornamental patterns or devices." *Letters Patent sealed.*

MORT.
23rd November 1867.

3323. WILLIAM MORT, of No. 155, Fenchurch Street, in the City of London, Merchant, for an invention for—"Improvements in preserving meat and in apparatus employed therein."—*A communication to him from abroad by Thomas Sutcliffe Mort, a person resident at Green Oaks, near Sydney, New South Wales.* *Letters Patent sealed.*

JOHNSON.
23rd November 1867.

3324. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms and in cartridges for the same."—*A communication to him from abroad by "La Société Industrielle Suisse," an incorporated Company, of Neuheusen, near Schaffhausen, Switzerland.* *Letters Patent sealed.*

HAMILTON.
25th November 1867.

3325. MILTON ALEXANDER HAMILTON, of Detroit, Michigan, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in the manufacture of railway rails." *Letters Patent sealed.*

BARTON.
25th November 1867.

3326. THOMAS BARTON, of No. 3, Catherine Street, Limehouse Fields, in the County of Middlesex, Nautical Instrument Maker, for an invention for—"An improved cribbage board." *Letters Patent sealed.*

BROWN.
25th November 1867.

3327. FREDERICK BROWN, of the firm of Brown and Green, of Luton, in the County of Bedford, Iron Founders, for an invention for—"Improvements in kitchen ranges." *Letters Patent sealed.*

TURNER.
25th November 1867.

3328. GEORGE TURNER, of the City of Dublin (Ireland), Wine Merchant, for an invention for —"Improvements in the construction of packing cases, and in the mode of locking the same to secure them against clandestine opening." *Letters Patent sealed.*

GREENWOOD.
25th November 1867.

3329. THOMAS LUKE GREENWOOD, of Dewsbury, in the County of York, Indigo-blue Dyer, for an invention for — "Improved means or apparatus for dyeing piece goods indigo-blue." *Provisional protection only.*

MAYALL.
25th November 1867.

3330. THOMAS JEFFERSON MAYALL, of the European Rubber Works, Pownall Road, Dalston, in the County of Middlesex, for an invention for—"Improvements in means or apparatus for accumulating and delivering sheets of paper or other fabric received from a printing press or other supply." *Provisional protection only.*

GALLOWAY. 25th November 1867.

3331. GEORGE BELL GALLOWAY, of the Borough and County of Newcastle-upon-Tyne, Inventor, for an invention for—"Improvements in merchants' ships and other vessels, and appliances connected therewith."

Provisional protection NOT *granted.*

WARD. 25th November 1867.

3332. ROBERT WARD, of the North of England Advertizer Office, Newcastle-upon-Tyne, for an invention for—"Improvements in machinery for spinning or twisting tobacco." *Letters Patent sealed.*

CHALMERS. 25th November 1867.

3333. THOMAS CHALMERS, of the City of Glasgow, now residing in the City of New York, in the United States of America, for an invention for—"Improvements in machinery for producing seamless tubes."—*A communication to him from abroad by William Forman Brooks, a person residing at New York City, in the United States of America.* *Complete specification; Letters Patent sealed.*

NEWTON. 25th November 1867.

3334. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of rotary steam-engine."—*A communication to him from abroad by William Owen, of the City of Toronto, Canada.* *Letters Patent sealed.*

STANLEY. 25th November 1867.

3335. WILLIAM FORD STANLEY, Optician, of Great Turnstile, Holborn, London, for an invention for—"A new meteorological instrument."

Provisional protection only.

LETCHFORD. 26th November 1867.

3336. ROBERT MICHAEL LETCHFORD, of Three Colts Lane, Bethnal Green, Middlesex, for an invention for—"Improvements in matches for lighting cigars and for other purposes." *Letters Patent sealed.*

SIM. 26th November 1867.

3337. WILLIAM SIM, of Glasgow, in the County of Lanark, North Britain, Contractor, for an invention for—"Improvements in arrangements or apparatus for watering and cleansing streets and roads, and for speedily removing snow."

Letters Patent sealed.

GREENHALGH. 26th November 1867.

3338. HENRY GREENHALGH, of Bolton, in the County of Lancaster, Machine Maker, for an invention for—"Certain improvements in mechanism or apparatus termed drawing frames employed for preparing cotton or other fibrous substances."

Provisional protection only.

SMITH. 26th November 1867.

3339. JOHN PATERSON SMITH, Civil Engineer, Glasgow, County of Lanark, Scotland, for an invention for—"Improvements in the manufacture of cutting tools and in the construction of tool holders." *Letters Patent sealed.*

SMITH. 26th November 1867.

3340. JOHN PATERSON SMITH, of Glasgow, in the County of Lanark, Civil Engineer, for an invention for—"An improved mode of coating and uniting metals with metals." *Letters Patent sealed.*

TOWNSHEND. 26th November 1867.

3341. EDWIN TOWNSHEND, of 25, Palace Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in tobacco pouches."

Letters Patent sealed.

PENNY. 26th November 1867.

3342. CHARLES ELIAS PENNY, of No. 77, Saint John Street, West Smithfield, in the County of Middlesex, Wholesale Stationer, for an invention for—"Improvements in envelopes." *Letters Patent sealed.*

HOPKINSON. HOPKINSON. 26th November 1867.

3343. JOHN ADDY HOPKINSON, and JOSEPH HOPKINSON, junior, both of Huddersfield, in the County of York, Engineers, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

HINKS. HINKS. 26th November 1867.

3344. JAMES HINKS, and JOSEPH HINKS, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in safety cans or vessels for containing, measuring or storing petroleum oil and other volatile inflammable liquids." *Provisional protection only.*

LAKE. 26th November 1867.

3345. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in breech-loading fire-arms and in cartridges for the same."—*A communication to him from abroad by Silvanus Frederic Van Choate, of the City and State of New York, United States of America.*

Complete specification; Letters Patent sealed.

LAKE.
26th November 1867.

3346. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in electric telegraph apparatus."—*A communication to him from abroad by Silvanus Frederic Van Choate, of the City and State of New York, United States of America.*

Complete specification; Letters Patent sealed.

HUDSON.
26th November 1867.

3347. JAMES HUDSON, junior, of Urpeth, in the County of Durham, Paper Maker, for an invention for—"Improvements in machinery for the manufacture of paper." *Provisional protection only.*

HIGGINBOTHAM.
26th November 1867.

3348. CHARLES TITUS HIGGINBOTHAM, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel."

Letters Patent sealed.

JOHNSON.
26th November 1867.

3349. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the treatment of rabbit, hare and other skins."—*A communication to him from abroad by Jean Leopold Roessler, Merchant, of Paris, in the Empire of France.* *Letters Patent sealed.*

NEWTON.
26th November 1867.

3350. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved steam injector for supplying water to steam-boilers or tanks."—*A communication to him from abroad by Neil Currie, James Currie and William Owen, all of the City of Toronto, Canada.* *Provisional protection only.*

NEWTON.
26th November 1867.

3351. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for preparing paper pulp."—*A communication to him from abroad by John W. Dixon, of Philadelphia, in the State of Pennsylvania, United States of America.* *Provisional protection only.*

BENTALL.
26th November 1867.

3352. EDWARD HAMMOND BENTALL, of Heybridge, near Maldon, in the County of Essex, Agricultural Implement Manufacturer, for an invention for—"An improvement in the conversion of iron into blooms." *Letters Patent sealed.*

HAMILTON.
26th November 1867.

3353. MILTON ALEXANDER HAMILTON, of Detroit, Michigan, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in lamp burners."

Provisional protection only.

COATES.
27th November 1867.

3354. CHARLES COATES, of Sunnyside, near Rawtenstall, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for cutting or dressing stone and in apparatus connected therewith." *Letters Patent sealed.*

JOHNSON.
27th November 1867.

3355. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction or arrangement of piles or fagots for wrought-iron beams, girders or bars of different forms."—*A communication to him from abroad by George Walters and Thomas Shaffer, of Phœnixville, County of Chester, State of Pennsylvania, United States of America.*

Letters Patent sealed.

FOWLER.
GRIFFITHS.
27th November 1867.

3356. WILLIAM FOWLER, of Whittington Hall, near Chesterfield, in the County of Derby, Ironmaster, and JOHN GRIFFITHS, of Sheepbridge, near Chesterfield aforesaid, Manager of Iron Works, for an invention for—"Improvements in the manufacture of the tyres of railway and other wheels." *Letters Patent sealed.*

CLARK.
27th November 1867.

3357. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in ornamenting gauze and other fabrics."—*A communication to him from abroad by Eugène Siess, Calico Printer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

NEWTON.
27th November 1867.

3358. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for making extracts from bark and other substances."—*A communication to him from abroad by James Warren Jones, of the City of Cumberland, State of Maryland, United States of America.* *Letters Patent sealed.*

BELKNAP.
27th November 1867.

3359. EDWARD BELKNAP, of Mortimer Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in the treatment of the solution of malt for brewing." *Letters Patent sealed.*

GARDNER.
27th November 1867.

3360. HENRY FRANCIS GARDNER, of Boston, in the United States of America, now of 4, Trafalgar Square, Charing Cross, in the County of Middlesex, for an invention for—"Improvements in the means of and apparatus for treating metals and minerals in order to produce their oxides or other chemical or mechanical combinations, and to separate metals from their ores or from their alloys."—*A communication to him from abroad by Zabdiel Adams Willard, residing at Boston, and William Gardner Adams, residing at Franklin, both in the State of Massachusetts, and United States of America.* *Letters Patent sealed.*

SMITH.
27th November 1867.

3361. JAMES SUTCLIFFE SMITH, of Bacup, in the County of Lancaster, Manufacturer, for an invention for—"Certain improvements in apparatus for ventilating buildings and other similar purposes." *Letters Patent sealed.*

MCFARLANE.
BARKER.
27th November 1867.

3362. JAMES MCFARLANE, of 47, North Albion Street, Glasgow, and GEORGE BARKER, of 218, St. George's Road, Glasgow, in the County of Lanark, for an invention for—"Improvements in the permanent way of railways."
Provisional protection only.

CHASE.
27th November 1867.

3363. SAMUEL AUGUSTUS CHASE, of Boston, in the County of Suffolk, and State of Massachusetts, United States of America, for an invention for—"Certain new and useful improvements in the running mechanism of car and carriage trucks of any nature." *Complete specification; Letters Patent sealed.*

LAKE.
27th November 1867.

3364. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved spring hinge."—*A communication to him from abroad by Jehiel Keeler Hoyt, of the City and State of New York, United States of America.* *Provisional protection only.*

HAMILTON.
27th November 1867.

3365. MILTON ALEXANDER HAMILTON, of Detroit, Michigan, United States of America, now of No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"An improved cutting implement more especially designed for opening cases or cans formed of sheet metal."
Provisional protection only.

MACKIE.
28th November 1867.

3366. ALEXANDER MACKIE, of Warrington, in the County of Lancaster, Newspaper Proprietor, for an invention for—"Improvements in apparatus for composing and distributing type." *Letters Patent sealed.*

BENTHAM.
28th November 1867.

3367. ROBERT HUNTER BENTHAM, of Manchester, in the County of Lancaster, for an invention for—"Improvements in the method of and apparatus for facilitating the flow of liquids from barrels or other closed vessels." *Provisional protection only.*

PALMER.
28th November 1867.

3368. WILLIAM PALMER, of Lines' Veterinary Forge, High Road, Kilburn, in the County of Middlesex, Farrier, for an invention for—"Improvements in the shape and manufacture of horses' shoes." *Letters Patent sealed.*

LARMUTH.
LARMUTH.
28th November 1867.

3369. MATTHEW HENRY LARMUTH, and LUKE HAMILTON LARMUTH, of the firm of Thomas Larmuth and Co., of Salford, in the County of Lancaster, Engineers, for an invention for—"Improvements in water-meters and water-power engines."
Provisional protection only.

HUGHES.
28th November 1867.

3370. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in tea and coffee pots."—*A communication to him from abroad by George Jones, of the City and County of New Haven, State of Connecticut, United States of America.*
Letters Patent sealed.

CARTER.
CARTER.
LISLE.
28th November 1867.

3371. THOMAS CARTER, and BENJAMIN CARTER, and JOHN LISLE, of Huddersfield, in the County of York, Machine Makers, for an invention for—"Improvements in machinery or apparatus employed in the preparation of wool or other fibrous substances, technically known as 'condensers.'" *Letters Patent sealed.*

COTTON.
28th November 1867.

3372. WILLIAM COTTON, of Hebden Bridge, in the County of York, for an invention for—"Improvements in machinery or apparatus for cutting woollen and cotton corduroy or other similar fabrics." *Letters Patent sealed.*

ROSE.
GIBSON.
28th November 1867.

3373. THOMAS ROSE, of Oxton, in the County of Chester, Ironfounder, and ROBERT EMERSON GIBSON, of New Brighton, in the same County, Merchant, for an invention for—"Improvements in machinery or apparatus for separating and cleaning seeds." *Provisional protection only.*

HUGHES.
28th November 1867.

3374. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"An improved sprinkler for powdered substances."—*A communication to him from abroad by George Jones, of the City and County of New Haven, State of Connecticut, United States of America.*
Letters Patent sealed.

HUGHES.
28th November 1867.

3375. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improved machinery for folding and pressing the edges of elastics used in boots and shoes."—*A communication to him from abroad by Antoine Guérin, of Lyons, in the Empire of France.*
Provisional protection only.

HORN.
28th November 1867.

3376. THOMAS STORY HORN, of Newcastle-upon-Tyne, Agent, for an invention for—"Improvements in miners' safety lamps." *Provisional protection only.*

JOHNSON.
28th November 1867.

3377. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"An improved hollow brick or block to be used for the floors, ceilings and other parts of buildings, and apparatus for moulding or manufacturing the same."—*A communication to him from abroad by François Louis Sabrout, of Paris, in the Empire of France.* *Provisional protection only.*

NAPIER.
28th November 1867.

3378. JAMES MURDOCH NAPIER, of the York Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in vessels and apparatus for the preserving and more convenient use of unguents." *Letters Patent sealed.*

WOOD.
28th November 1867.

3379. EDWARD WOOD, of the firm of John and Edward Wood, of Bolton, in the County of Lancaster, Engineers, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

PRATT.
28th November 1867.

3380. JAMES RICHARD PRATT, of Fenton, Stoke-on-Trent, in the County of Stafford, Earthenware Manufacturer, for an invention for—"Improvements in the construction of articles of earthenware." *Letters Patent sealed.*

BENTALL.
28th November 1867.

3381. EDWARD HAMMOND BENTALL, of Heybridge, near Maldon, in the County of Essex, Agricultural Implement Manufacturer, for an invention for—"Improvements in the manufacture of nuts and bolts." *Letters Patent sealed.*

SCHOLEFIELD.
28th November 1867.

3382. JOHN SCHOLEFIELD, of Old Street, St. Luke's, in the County of Middlesex, Umbrella Maker, for an invention for—"Improvements in cases or covers for umbrellas, and in the umbrellas to which such cases or covers are to be applied."
Letters Patent sealed.

TOWERS.
28th November 1867.

3383. JOSEPH ROBINSON TOWERS, of Hereford Road, Westbourne Grove, in the County of Middlesex, for an invention for—"Improvements in bedsteads, which improvements are also applicable to other purposes." *Provisional protection only.*

BAYLIS.
28th November 1867.

3384. JAMES BAYLIS, of Kinburn Cottage, Durdham Down, in the City and County of Bristol, for an invention for—"An improved chemical preparation or compound to be used in preparing mixed textile fabrics for dyeing or coloring."
Provisional protection only.

LAKE.
29th November 1867.

3385. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved apparatus for boiling and washing textile fabrics and fibres."—*A communication to him from abroad by Daniel Bliss Dudley, of the City and State of New York, United States of America.*
Letters Patent sealed; no specification filed.

JORDAN.
DARLINGTON.
29th November 1867.

3386. THOMAS BROWN JORDAN, of South Lambeth, in the County of Surrey, Mechanical Engineer, and JOHN DARLINGTON, of Moorgate Street Chambers, in the City of London, Mining Engineer, for an invention for—"Improvements in machinery for boring rocks, and in apparatus for driving rock-boring, tunnelling, coal-cutting and other machinery employed in mines, collieries and quarries."
Letters Patent sealed.

FRASER.
DUNCAN.
29th November 1867.

3387. JAMES FRASER, of Liverpool, in the County of Lancaster, Stationer, and GEORGE DUNCAN, of the same place, Engineer, for an invention for—"Improved combined machinery for printing." *Letters Patent sealed.*

ROSE. GIBSON. 29th November 1867.

3388. THOMAS ROSE, of Oxton, in the County of Chester, Ironfounder, and ROBERT EMERSON GIBSON, of New Brighton, in the same County, Merchant, for an invention for—"An improved mode of treating cotton seed to obtain oil therefrom, and in machinery employed therein." *Letters Patent sealed.*

ALBISSER. 29th November 1867.

3389. CHARLES ALBISSER, of 11, Mincing Lane, in the City of London, for an invention for—"Improvements in the preparation of sulphate of magnesia, applicable to the treatment of the crude potash salts of Stassfurt, and the refuse from the manufacture of chloride of potassium."—*A communication to him from abroad by Julius Vorster and Hermann Grüneberg, persons resident at Cologne, in the Kingdom of Prussia.* *Letters Patent sealed.*

MAURY. 29th November 1867.

3390. MATHEW FONTAINE MAURY, of No. 3, Belsize Square, London, for an invention for—"An improved mode for protecting submarine cables when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out." *Provisional protection only.*

COWAN. 29th November 1867.

3391. HERBERT SANDERSON COWAN, of Kensington, in the County of Middlesex, for an invention for—"Improvements in apparatus for signalling at sea." *Letters Patent sealed.*

HOUGHTON. 29th November 1867.

3392. WILLIAM CHADWICK HOUGHTON, of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in apparatus to be employed in connection with hydraulic or other packing presses." *Letters Patent sealed.*

JOHNSON. 29th November 1867.

3393. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery or apparatus for grinding bones, ores and other substances, a part of which improvements is applicable to footstep bearings generally."—*A communication to him from abroad by Edwin Pugh Baugh, of Pennsylvania, United States of America.* *Letters Patent sealed.*

TURNER. NEWTON. 29th November 1867.

3394. ARCHIBALD TURNER, of Leicester, Elastic Fabric Manufacturer, and WILLIAM EDWARD NEWTON, of 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of carpets and in warping and preparing warps for the same, and in the machinery or apparatus to be employed therefor." *Letters Patent sealed.*

NEWTON. 29th November 1867.

3395. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved method of and apparatus for washing or cleansing clothes."—*A communication to him from abroad by Moses Wilmington Staples, of Catskill, Greene County, State of New York, United States of America.* *Provisional protection only.*

CLARK. 29th November 1867.

3396. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in chronometers."—*A communication to him from abroad by Simon Vissière, Chronometer Maker, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

PARKES. 29th November 1867.

3397. JOHN JOSEPH PARKES, of London Street, Paddington, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in the means of ventilating rooms and buildings, and in apparatus for the same." *Letters Patent sealed.*

GEDGE. 30th November 1867.

3398. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved means of connecting and disconnecting locomotive engines and railway carriages and other vehicles."—*A communication to him from abroad by Louis Joseph Lecocq, of 39, Faubourg St. Martin, Paris, France.* *Provisional protection only.*

GEDGE. 30th November 1867.

3399. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved brake-washer."—*A communication to him from abroad by Arthur Dillon-Corneck, Engineer, of No 15, Passage des Petites Ecuries, Paris, France.* *Letters Patent sealed.*

McCLURE. 30th November 1867.

3400. RICHARD McCLURE, of Barrow-in-Furness, in the County of Lancaster, for an invention for—"Certain improvements in moulds for casting Bessemer steel and other metals." *Provisional protection only.*

BRIGGS. 30th November 1867.

3401. THOMAS BRIGGS, junior, of Manchester, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for drying and stretching woven fabrics, paper or continuous lengths of other similar materials."
Provisional protection only.

STARKEY. 30th November 1867.

3402. WILLIAM STARKEY, of Yeadon, near Leeds, in the County of York, for an invention for—"An improved apparatus for obtaining motive-power."
Letters Patent sealed.

LAKE. 30th November 1867.

3403. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved lubricating apparatus."—*A communication to him from abroad by Gardner Waters and David Waters, both of Cincinnati, Ohio, United States of America. Complete specification; Letters Patent sealed.*

STEANE. 30th November 1867.

3404. SAMUEL EDWARD TYRRELL STEANE, of Barking, in the County of Essex, Soap Manufacturer, for an invention for—"Improvements in globes and glasses for the transmission of artificial and other light."
Provisional protection only.

LAKE. 30th November 1867.

3405. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"An improved mode of and means for clarifying saccharine solutions."—*A communication to him from abroad by Joseph Edward Freund, of the City and State of New York, United States of America.*
Provisional protection only.

SHARROCK. 30th November 1867.

3406. SAMUEL SHARROCK, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in the posts or uprights for electric telegraphs."
Letters Patent sealed.

COMPTON. 30th November 1867.

3407. ROBERT FLETCHER COMPTON, of Tewkesbury, in the County of Gloucester, Railway Agent, for an invention for—"Improvements in couplings for railway wagons."
Provisional protection only.

HOLMES. HOLMES. HOLMES. LANCASTER. LANCASTER. 30th November 1867.

3408. THOMAS HOLMES, WILLIAM WAINMAN HOLMES, JOHN FREDERICK HOLMES, JOHN BENTLEY LANCASTER, and DAVID LANCASTER, all of Baildon, near Leeds, in the County of York, for an invention for—"Improvements in spinning machinery."
Provisional protection only.

CLAY. 30th November 1867.

3409. RICHARD CLAY the younger, of Muswell Hill, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms."
Letters Patent sealed.

FITTER. 30th November 1867.

3410. JOSEPH FITTER, of Birmingham, in the County of Warwick, Machinist, for an invention for—"Improvements in the construction and manufacture of mechanism for expanding tables and other expanding furniture."
Letters Patent sealed.

PRIESTLEY. BOWER. 30th November 1867.

3411. WILLIAM PRIESTLEY, and WILLIAM BOWER, both of Harden, near Bingley, in the County of York, for an invention for—"Improvements in spinning machinery."
Provisional protection only.

WIDENHAM. REYNOLDS. 2nd December 1867.

3412. THOMAS FINER WIDENHAM, of 9, Leverton Street, St. Pancras, London, and JOHN REYNOLDS, of 124, St. Paul's Road, Camden Square, St. Pancras, London, for an invention for—"An improvement in the construction of easy chairs, settees, sofas, seats for railway and other carriages, and invalid hospital couches or carriages."
Provisional protection only.

WOOLFIELD. 2nd December 1867.

3413. JOHN CLOWES WOOLFIELD, of St. Alban's, in the County of Hertford, for an invention for—"Improvements in boilers for heating water to supply pipes, tubes or other apparatus for warming buildings."
Letters Patent sealed.

HEIRON. 2nd December 1867.

3414. GEORGE HEIRON, of No. 11, Leadenhall Street, in the City of London, for an invention for—"An improved method of constructing a castor for containing pepper, salt or other condiments for domestic use."
Letters Patent sealed.

PRICE. 2nd December 1867.

3415. EDWARD PRICE, Engineer and Manager of the Hampton Court Gas Company's Works, Hampton Wick, in the County of Middlesex, for an invention for—"Improvements in apparatus for regulating the supply of gas to burners."
Letters Patent sealed.

HARGROVE.
HARGROVE.
2nd December 1867.

3416. CHARLES HARGROVE, and SAMUEL HARGROVE, junior, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"An improvement in the manufacture of bells." *Provisional protection only.*

LAKE.
2nd December 1867.

3417. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in the means for filtering syrup in the manufacture of sugar."—*A communication to him from abroad by Joseph Edward Freund and Helem Merrill, both of the City and State of New York, United States of America.* *Provisional protection only.*

DEAN.
2nd December 1867.

3418. JAMES HILL DEAN, of Bilston, in the County of Stafford, for an invention for—"Improvements in handles for bails, buckets, cove hods, scoops and the like." *Provisional protection only.*

SCHOFIELD.
2nd December 1867.

3419. WILLIAM SCHOFIELD, of Baxenden, in the County of Lancaster, Turkey Red Dyer, for an invention for—"Improvements in preparing cloth and yarn to be dyed Turkey red, part of which improvements are applicable to bleaching yarn." *Letters Patent sealed.*

BARKER.
2nd December 1867.

3420. DAVID BARKER, of Northfleet, in the County of Kent, for an invention for—"Improvements in the construction of chambers for drying artificial fuel and other substances." *Letters Patent sealed.*

BLACK.
HAWTHORN.
2nd December 1867.

3421. WILLIAM BLACK, and THOMAS HAWTHORN, both of the Town of Gateshead, in the County of Durham, for an invention for—"Improvements in valves for steam-engines." *Letters Patent sealed.*

PHILCOX.
2nd December 1867.

3422. GEORGE PHILCOX, of 87, Cleveland Street, in the County of Middlesex, for an invention for—"Improvements in horse-shoes and in the method of fixing or attaching the same to horses' hoofs." *Provisional protection only.*

PAGE.
2nd December 1867.

3423. ROBERT WILLIAM PAGE, of Park Walk, Chelsea, in the County of Middlesex, for an invention for—"Improvements in the construction of hand garden engines and hydropults." *Provisional protection only.*

HADLEY.
2nd December 1867.

3424. JONAH HADLEY, of the City Flour Mills, Upper Thames Street, in the City of London, for an invention for—"An improved mode of and apparatus for decorticating and drying corn and other grain." *Letters Patent sealed.*

BREEN.
2nd December 1867.

3425. GEORGE BREEN, of the City of Glasgow, Merchant, for an invention for—"Improvements in steam winches, which are also applicable to other similar purposes."—*A communication to him from abroad by Joseph Corradi, of Marseilles, in the Empire of France, Engineer of the Compagnie Anomyme de Navigation Mixte.* *Letters Patent sealed.*

BIGGS.
2nd December 1867.

3426. JOHN HOWARD WORTHINGTON BIGGS, of Manchester, for an invention for—"Improvements in apparatus to be used in joining warp ends, which apparatus may also be otherwise applied." *Provisional protection only.*

FOSTER.
2nd December 1867.

3427. FREDERICK FOSTER, of No. 60, Mortimer Road, Kingsland, in the County of Middlesex, for an invention for—"Improvements in miners' safety lamps and in the mode of manufacturing the same." *Provisional protection only.*

PORTER.
2nd December 1867.

3428. ROBERT PORTER, of Birmingham, in the County of Warwick, Mechanical Engineer, for an invention for—"Improvements in the construction of metallic and other buildings." *Letters Patent sealed.*

LEACHMAN.
HOLROYD.
2nd December 1867.

3429. WILLIAM BRADSHAW LEACHMAN, and JOHN HOLROYD, both of Leeds, in the County of York, for an invention for—"Improved machinery for leather shaving and dressing." *Letters Patent sealed.*

WILSON.
3rd December 1867.

3430. JOHN HAYS WILSON, of the firm of John Hays Wilson and Company, of Liverpool, in the County of Lancaster, Brassfounders and Ships' Ironmongers, for an invention for—"Improvements applicable to waterclosets and pumps connected therewith, which latter improvements are applicable to lift-pumps generally." *Letters Patent sealed.*

VAILE.
3rd December 1867.

3431. SAMUEL VAILE, of Basinghall Street, in the City of London, for an invention for—"Improvements in tables." *Letters Patent sealed.*

COLLINGHAM.
SMITH.
3rd December 1867.

3432. JAMES COLLINGHAM, Worsted Spinner, and THOMAS ELLISON SMITH, Machine Maker, of the Town of Keighley, in the County of York, for an invention for—"Improvements in the steps of spindles for spinning, roving, slubbing, doubling and twisting frames." *Complete specification; Letters Patent sealed.*

ECKERSLEY. MARTIN. 3rd December 1867.

3433. JAMES ECKERSLEY, and DAVID MARTIN, both of Edinburgh, in the County of Midlothian, North Britain, for an invention for—"Improvements in the construction of the permanent way of railways." *Letters Patent sealed.*

HOPE. 3rd December 1867.

3434. JOHN GRAHAM HOPE, of Edinburgh, in the County of Midlothian, North Britain, for an invention for—"Improvements in utilizing mineral and other oils for generating steam, and in the means or apparatus for effecting the same." *Provisional protection only.*

SHAVE. 3rd December 1867.

3435. WILLIAM SHAVE, of Sturminster, Wimborn, in the County of Dorset, Trap Manufacturer, for an invention for—"Improvements in rabbit and vermin traps." *Provisional protection only.*

PIDDING. 3rd December 1867.

3436. WILLIAM PIDDING, of No. 216, Beresford Street, Walworth, in the County of Surrey, Gentleman, for an invention for—"Improvements in placing, arranging or fixing needles and threads and other like fibrous materials on to reels or receivers, so as to render them more convenient for use, also in the manufacture and forms of such reels or receivers, and in the materials thereof." *Provisional protection only.*

THORPE. 3rd December 1867.

3437. JOHN THORPE, of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics." *Letters Patent sealed.*

GARDNER. 3rd December 1867.

3438. HENRY FRANCIS GARDNER, of Boston, in the United States of America, now of 4, Trafulgar Square, Charing Cross, in the County of Middlesex, for an invention for—"Improvements in horses' bits and stirrups."—*A communication to him from abroad by William Dale and George Henry Gardner, both resident at Boston, Massachusetts, United States of America.* *Provisional protection only.*

BROWN. MAY. 3rd December 1867.

3439. WILLIAM BROWN, and CHARLES NEALE MAY, of North Wilts Foundry, Devizes, in the County of Wilts, Engineers, for an invention for—"Improvements in portable and other steam-engines and boilers." *Letters Patent sealed.*

GJERS. 3rd December 1867.

3440. JOHN GJERS, of Middlesbrough, in the North Riding of the County of York, Engineer, for an invention for—"Certain improvements in the manufacture of cast steel and homogeneous iron." *Letters Patent sealed.*

HORNSBY. PHILLIPS. 3rd December 1867.

3441. RICHARD HORNSBY, and JAMES EDWIN PHILLIPS, both of Spittlegate Iron Works, Grantham, in the County of Lincoln, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

SANGSTER. 3rd December 1867.

3442. WILLIAM SANGSTER, of Cheapside, in the City of London, for an invention for—"Improvements in umbrellas." *Provisional protection only.*

GREW. 3rd December 1867.

3443. NATHANIEL GREW, of 8, New Broad Street, in the City of London, for an invention for—"Improvements in apparatus for cleaning or decorticating cotton seed and other grains or seeds." *Letters Patent sealed.*

ENSOR. 3rd December 1867.

3444. FREDERICK RAINFORD ENSOR, of the Park, Nottingham, for an invention for—"Improvements in the manufacture of lace in twist-lace machines." *Letters Patent sealed.*

PALEY. 4th December 1867.

3445. CHRISTOPHER PALEY, of No. 26, Eagle Street, Red Lion Square, in the County of Middlesex, Cordwainer, for an invention for—"An improved elastic material to be used as springs in boots and shoes, and in various other ways to which the same may be applicable." *Letters Patent sealed.*

SANDERS. 4th December 1867.

3446. JOSEPH SANDERS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in braces for supporting articles of dress." *Provisional protection only.*

STEPHENSON. STEPHENSON. STEPHENSON. 4th December 1867.

3447. THOMAS STEPHENSON, GEORGE BALME STEPHENSON, and BENJAMIN STEPHENSON, all of Bradford, in the County of York, for an invention for—"An improved mode of waxing warps in the process of weaving." *Letters Patent sealed.*

NEWTON. 4th December 1867.

3448. JOSEPH NEWTON, of Globe Foundry, Leeds, in the County of York, for an invention for—"Improvements in the means of and apparatus for lubricating certain parts of doffing knife apparatus." *Provisional protection only.*

LETCHFORD. 4th December 1867.

3449. ROBERT MICHAEL LETCHFORD, of Three Colts Lane, Bethnal Green, Middlesex, for an invention for—"Improvements in circular boxes for the purpose of abstracting their contents without removing the lid or cover." *Letters Patent sealed.*

GRAY.
4th December 1867.

3450. ROBERT REID GRAY, of Glasgow, in the County of Lanark, North Britain, Tinsmith, for an invention for—"Improvements in metallic casks or vessels." *Letters Patent sealed.*

HUGHES.
4th December 1867.

3451. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"An improved lighting, heating and cooking apparatus, part of which is applicable to other purposes."—*A communication to him from abroad by Zoeth Durfee, of Philadelphia, United States of America.* *Letters Patent sealed.*

BAKER.
LINDLEY.
4th December 1867.

3452. FRANCIS BRYAN BAKER, and LEONARD LINDLEY, both of the Town and County of the Town of Nottingham, Lace Dyers and Dressers, for an invention for —"Improvements in ornamenting lace and other textile fabrics." *Provisional protection only.*

WALKER.
4th December 1867.

3453. ELI WALKER, of Westmoreland Street, Pimlico, in the County of Middlesex, for an invention for—"Improvements in the construction of breech-loading ordnance." *Letters Patent sealed.*

JOLLY.
4th December 1867.

3454. FREDERIC JOLLY, of Horwich, in the County of Lancaster, Bleacher, for an invention for—"Improvements in machinery for clamping and stretching woven fabrics." *Provisional protection only.*

WEBSTER.
OXLEY.
4th December 1867.

3455. JOSEPH THOMAS WEBSTER, of Mansfield, in the County of Nottingham, Gentleman, and WILLIAM OXLEY, of Manchester, in the County of Lancaster, Mill Furnisher, for an invention for—"Improvements in machinery for spinning and doubling fibrous materials." *Provisional protection only.*

CLARKE.
4th December 1867.

3456. JOHN FARRAND CLARKE, Gas Engineer, of Moorgate Street, in the City of London, for an invention for—"Improvements in means and apparatus to be applied for melting snow and ice in public thoroughfares or otherwise." *Letters Patent sealed.*

HERRING.
4th December 1867.

3457. WILLIAM ANTHONY HERRING, of Chertsey, in the County of Surrey, Engineer and Ironfounder, for an invention for—"Improvements in apparatus for warming buildings in which high pressure steam-engines are employed." *Letters Patent sealed.*

JOHNSON.
5th December 1867.

3458. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the production of materials suitable for blasting and other similar purposes."—*A communication to him from abroad by Carl Dittmar, of Berlin, Prussia, Civil Engineer.* *Provisional protection only.*

SMITH.
5th December 1867.

3459. DANIEL SMITH, of Bury, in the County of Lancaster, for an invention for—"Improvements in steam-boiler furnaces and in apparatus connected therewith." *Provisional protection only.*

WORTH.
5th December 1867.

3460. SAMUEL LEAKE WORTH, of 293, Oxford S^{t}, London, Brush Manufacturer, for an invention for—"Improvements in step chairs, ladders and steps." *Provisional protection only.*

GREEN.
5th December 1867.

3461. JOSEPH GREEN, of Lockwood, near Huddersfield, in the County of York, Grocer, for an invention for—"Improvements in machinery or apparatus for cutting or breaking sugar." *Provisional protection only.*

MABSON.
5th December 1867.

3462. JOHN MABSON, of the Town and County of the Town of Newcastle-upon-Tyne, for an invention for—"Improvements in bags for coffee and other such like pots." *Letters Patent sealed.*

PERKINS.
SMELLIE.
5th December 1867.

3463. STANHOPE PERKINS, of Gorton, near Manchester, in the County of Lancaster, Engineer, and WILLIAM SMELLIE, of the same place, Forge Manager, for an invention for—"Improvements in the manufacture of malleable metal of a steely quality, partly from Bessemer 'scrap' or other Bessemer metal." *Letters Patent sealed.*

SCOTT.
5th December 1867.

3464. JAMES GIBSON SCOTT, of Edinburgh, in the County of Mid Lothian, North Britain, for an invention for—"An improved means to be employed for effecting the safe transmission of money or money orders, also improvements in the formation of documents that have to be separated." *Letters Patent sealed.*

ADAMS.
5th December 1867.

3465. JAMES ADAMS, of No. 12, Charles Street, Blackfriars Road, in the County of Surrey, Engineer, for an invention for—"Improvements in apparatus for dating railway and other tickets." *Complete specification; Letters Patent sealed.*

STERRY.
5th December 1867.

3466. ARTHUR CHARLES STERRY, of Woodgate Cottage, Ewell, in the County of Surrey, for an invention for—"Improvements in engines worked by heated air or gas." *Provisional protection only.*

TILDESLEY.
BIRD.
5th December 1867.

3467. MATTHEW TILDESLEY, of Willenhall, in the County of Stafford, Manufacturer, and JAMES BIRD, of the same place, Manager, for an invention for—"Improvements in annealing furnaces and in apparatus to be employed therein, parts of which improvements may be applied to certain other descriptions of furnaces and fires." *Provisional protection only.*

LEIGH.
5th December 1867.

3468. THOMAS JOSEPH LEIGH, of Laurence Pountney Lane, Cannon Street, in the City of London, Civil Engineer, for an invention for—"Improvements in furnaces and in effecting the combustion of fuel therein." *Letters Patent sealed.*

DESIGNOLLE.
CASTHELAZ.
5th December 1867.

3469. PAUL GUSTAVE LOUIS GABRIEL DESIGNOLLE, and JOHN CASTHELAZ, Chemists, residing the first at No. 57, Rue de la Seine, the second at Rue Ste. Croix de la Bretonnerie, in the Empire of France, for an invention for—"Improvements in the manufacture of explosive and fulminating powders." *Letters Patent sealed.*

PONTIFEX.
5th December 1867.

3470. EDMUND ALFRED PONTIFEX, of Shoe Lane, in the City of London, Engineer, for an invention for—"Improvements in condensers." *Letters Patent sealed.*

GOLDSTEIN.
6th December 1867.

3471. SIGMUND GOLDSTEIN, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in various portions of ladies' and gentleman's wearing-apparel." *Letters Patent sealed.*

KENYON.
ARMITSTEAD.
6th December 1867.

3472. JOHN WILLIAM KENYON, and ROBERT ARTHUR ARMITSTEAD, both of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in safety apparatus for steam-boilers or steam generators." *Letters Patent sealed.*

DURRANS.
6th December 1867.

3473. JAMES DURRANS, of Thurlstone, near Penistone, in the County of York, for an invention for—"An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes." *Letters Patent sealed.*

KERBY.
6th December 1867.

3474. CORNELIUS KERBY, of St. Dunstan's Hill, in the City of London, for an invention for—"Improvements in the combination of materials to be used for filtering liquids." *Provisional protection only.*

NICHOLSON.
6th December 1867.

3475. WILLIAM NEWZAM NICHOLSON, of the Trent Iron Works, Newark, in the County of Nottingham, Agricultural Engineer, for an invention for—"Improvements in machinery for spreading grasses, part of which improvements are also applicable to machines for cutting and collecting grasses or corn." *Provisional protection only.*

FOVEAUX.
6th December 1867.

3476. HENRY JOSEPH FRANCIS HUBERT FOVEAUX, of the firm of John Weiss and Son, of the Strand, in the City of Westminster, Surgical Instrument Makers, for an invention for—"An improved construction of cell for galvanic batteries." *Provisional protection only.*

ROPER.
6th December 1867.

3477. FRANCIS ROPER, of Monson Street, in the County of Lincoln, Machine Maker, for an invention for—"Improvements in apparatus for driving straw elevators." *Letters Patent sealed.*

EVANS.
6th December 1867.

3478. JABEZ EVANS, of Tewkesbury, in the County of Gloucester, Whitesmith, for an invention for—"Improvements in couplings for railway trucks." *Provisional protection only.*

JONES.
ABRAHALL.
6th December 1867.

3479. RICHARD JONES, of Birmingham, in the County of Warwick, Jeweller, and JOHN ABRAHALL, of Birmingham, aforesaid, Jeweller, for an invention for—"Improvement in the manufacture of hollow metallic seamless spheres and ornaments." *Provisional protection only.*

LINDSAY.
6th December 1867.

3480. ROBERT WEBBER LINDSAY, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in machinery for the manufacture of brass and copper tubes." *Provisional protection only.*

BRAZIL.
7th December 1867.

3481. CLARANCE BRAZIL, of Chorley, in the County of Lancaster, Manufacturer, for an invention for—"Improvements in machinery for sizing cotton and other yarns." *Provisional protection only.*

HODGE.
7th December 1867.

3482. PAUL RAPSEY HODGE, of No. 10, Adam Street, Adelphi, in the Parish of St. Martin-in-the-Fields and County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery and apparatus for heating and forming metals for railway wheel tyres." *Letters Patent sealed.*

JONES.
POWELL.
7th December 1867.

3483. RICHARD BOULTON JONES, of Nelson Terrace, City Road, Middlesex, Telegraphic Engineer, and WILLIAM POWELL, of Circus Place, Finsbury, Middlesex, Telegraph Engineer and Contractor, for an invention for—"Improvements for the prevention of incrustation in steam-boilers." *Letters Patent sealed.*

MORRISON.
7th December 1867.

3484. JAMES BEALL MORRISON, of St. Louis, Missouri, United States of America, now of No. 45, Goodge Street, in the County of Middlesex, Surgeon Dentist, for an invention for—"Improvements in the construction of operating chairs more especially designed for dentists, parts of such improvements being applicable for other purposes." *Letters Patent sealed.*

BARRETT.
LEGGOTT.
7th December 1867.

3485. OBADIAH BARRETT, and HENRY LEGGOTT, of Bradford, in the County of York, for an invention for—"An improved knife cleaner." *Letters Patent sealed.*

BLAKEY.
FOX.
7th December 1867.

3486. JOHN BLAKEY, of Liverpool, in the County of Lancaster, Saddler, and HOWARD BUSBY FOX, of Oxton, in the County of Chester, Gentleman, for an invention for—"Improvements in collars, cuffs, anklets, belts and other like articles of wearing-apparel." *Letters Patent sealed.*

PARTINGTON.
7th December 1867.

3487. JOHN PARTINGTON, of Astley, in the County of Lancaster, for an invention for—"Certain improvements in the method of heating buildings and in the apparatus connected therewith." *Provisional protection only.*

RAE.
MILLER.
7th December 1867.

3488. JAMES RAE, of Sydenham, in the County of Kent, Engineer, and GEORGE MILLER, of Glasgow, in the County of Lanark, Rivet Manufacturer, for an invention for—"Improvements in railway wheels." *Letters Patent sealed.*

CLISSOLD.
7th December 1867.

3489. WILLIAM CLISSOLD, of Dudbridge Works, near Stroud, in the County of Gloucester, Engineer, for an invention for—"Improved machinery for preparing fibrous substances for spinning." *Letters Patent sealed.*

BEATTY.
7th December 1867.

3490. JOHN BEATTY, of Ballymena, in the County of Antrim, Ireland, for an invention for—"A new or improved candle-dipping machine." *Letters Patent sealed.*

BARKER.
7th December 1867.

3491. CHARLES MATHEW BARKER, of 12, Kennington Park Road, in the County of Surrey, Engineer, for an invention for—"Improvements in socket and flange spigot pipes." *Letters Patent sealed.*

WARRY.
7th December 1867.

3492. ROBERT WARRY, Armourer Serjeant, of St. Mary's Barracks, Chatham, in the County of Kent, for an invention for—"Improvements in the construction of breech-loading fire-arms." *Letters Patent sealed.*

CLARK.
7th December 1867.

3493. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in orthopedic apparatus for the prevention and treatment of spinal diseases."—*A communication to him from abroad by Mademoiselle Victorine Leneveu, Corset Maker, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

MUNN.
7th December 1867.

3494. JOSEPH ALVIN MUNN, of the City and State of New York, United States of America, now of No. 15, Commercial Street, in the County of Middlesex, for an nvention for—"An improved weighing apparatus." *Provisional protection only.*

KEIRBY.
9th December 1867.

3495. EDWARD KEIRBY, of Rochdale, in the County of Lancaster, India-Rubber Merchant, for an invention for—"Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings." *Letters Patent sealed.*

COOKE.
9th December 1867.

3496. WILLIAM HENRY COOKE, of Oldham, in the County of Lancaster, for an invention for—"Certain improvements in springs to be applied to doors and for similar purposes." *Provisional protection only.*

CLAPPERTON. 9th December 1867.

3497. WILLIAM CLAPPERTON, Manager to Messrs. John McDowall and Sons, Walkinshaw Foundry, of Johnstone, in the County of Renfrew, North Britain, for an invention for—"Improvements in machinery for shaping cask headings and similar articles." *Letters Patent sealed.*

CLARK. 9th December 1867.

3498. WILLIAM CLARK, of 75, Baker Street, Portman Square, in the County of Middlesex, for an invention for—"A new instrument for clipping or shearing horses or other animals, also applicable to other similar useful purposes." *Letters Patent sealed.*

ROSE. 9th December 1867.

3499. LAUCHLAN ROSE, of Leith, in the Kingdom of Scotland, Lime and Lemon Juice Merchant, for an invention for—"An improved mode of preserving vegetable juices." *Letters Patent sealed.*

LAKE. 9th December 1867.

3500. WILLIAM ROBERT LAKE, of the "International Patent Office," No. 8, Southampton Buildings, Chancery Lane, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in excavating machines more especially designed for making ditches and drains."—*A communication to him from abroad by Henry Charles Ingraham, of Tecumseh, Michigan, United States of America.* *Letters Patent sealed.*

BESSEMER. 9th December 1867.

3501. HENRY BESSEMER, of Queen Street Place, Cannon Street, in the City of London, for an invention for—"Improvements in the manufacture of fire-bricks, tiles and solid or hollow fire-lumps, and in the manufacture of retorts, pipes, crucibles, or other hollow vessels or moulds required to resist a high degree of heat, and also in the manufacture of ornamental bricks, tiles, quarries, trusses, bosses, vases, busts, figures, columns, capitals, bases, cornices, copings, tablets, finials, and other articles of an ornamental character employed in building and in architectural decorations." *Letters Patent sealed.*

MARTIN. BARRETT. WEBB. 9th December 1867.

3502. CHARLES MARTIN, of Chancery Lane, in the County of Middlesex, Civil Engineer, WILLIAM BARRETT, of Norton, in the County of Durham, Ironmaster, and THOMAS STAMMERS WEBB, of Norton aforesaid, Metallurgical Chemist, for an invention for—"Improvements in the treatment and reduction of titaniferous iron ores and in the manufacture of iron, and in the construction of furnaces to be employed therein." *Provisional protection only.*

KERBY. 10th December 1867.

3503. CORNELIUS KERBY, of St. Dunstan's Hill, in the City of London, for an invention for—"Improved apparatus for filtering liquids." *Provisional protection only.*

LOWNDES. 10th December 1867.

3504. ROBERT GILLIES LOWNDES, of the firm of James Young and Sons, Bleachers and Finishers, of Auldhousefield and Crofthead, both in the County of Renfrew, North Britain, for an invention for—"Improvements in finishing textile and other fabrics, and in the machinery or apparatus employed therefor." *Provisional protection only.*

CONNER. 10th December 1867.

3505. CHARLES CONNER, of Old Ford, in the County of Middlesex, Shoemaker, for an invention for—"Improvements in umbrellas and parasols." *Letters Patent sealed.*

BARLOW. 10th December 1867.

3506. WILLIAM HENRY BARLOW, of 2, Old Palace Yard, Westminster, for an invention for—"Improvements in apparatus for measuring approximately the quantities of earth-work in continuous cuttings or banks such as are used in the formation of railways." *Letters Patent sealed.*

PALLISER. 10th December 1867.

3507. WILLIAM PALLISER, Major unattached, of the Army and Navy Club, Pall Mall, in the County of Middlesex, for an invention for—"Improvements in ordnance and in projectiles used therewith, as also in the processes employed in their manufacture." *Letters Patent sealed.*

LEACHMAN. 10th December 1867.

3508. WILLIAM BRADSHAW LEACHMAN, of Leeds, in the County of York, Engineer, for an invention for—"An improved rotary water or steam motive-power engine." *Letters Patent sealed.*

GROUT. MATHEWS. 10th December 1867.

3509. JOHN GROUT, of the City of Hereford, Ironmonger, and EDWIN MATHEWS, also of the City of Hereford, Agent, for an invention for—"Improvements in apparatus for training or growing hops and other plants, which improvements may also be applied to line-posts and other posts or supports for various purposes." *Provisional protection only.*

BURTON.
10th December 1867.

3510. JOHN WATSON BURTON, of Leeds, in the County of York, Gentleman, for an invention for—"Improvements in the treatment of fibrous materials and in apparatus used therein." *Letters Patent sealed.*

WOOLFIELD.
11th December 1867.

3511. JOHN WOOLFIELD, of Saint Peters, in the Borough of Saint Albans, in the County of Hertford, Gentleman, for an invention for—"An improvement in machinery for corrugating sheets of metal." *Provisional protection only.*

HOLCROFT.
DACK.
11th December 1867.

3512. GEORGE HOLCROFT, and WILLIAM NATHAN DACK, both of the City of Manchester, Engineers, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

GILES.
11th December 1867.

3513. HENRY GILES, of New North Road, in the County of Middlesex, for an invention for—"Improvements in the manufacture of hats and bonnets, and in the apparatus employed therein." *Provisional protection only.*

FRASER.
11th December 1867.

3514. WILLIAM JOHN FRASER, of 10, Commercial Road East, in the County of Middlesex, Engineer, for an invention for—"Improvements in tubular steam-boilers." *Provisional protection only.*

CAMME.
DELPECH.
11th December 1867.

3515. ALPHONSE CAMME, of No. 60, Boulevart de Strasbourg, Paris, France, Civil Engineer, and FERDINAND DELPECH, of No. 21, Grande Rue Batignolles, Paris, Engineer of the Lower Seine Towing Company, for an invention for—"Improvements in manufacturing iron and steel chains without welding." *Letters Patent sealed.*

CLARK.
11th December 1867.

3516. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in presses for stamping or endorsing."—*A communication to him from abroad by Edouard Cornélis, Merchant, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

CLARK.
11th December 1867.

3517. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes."—*A communication to him from abroad by Jules Feuquières, Electro Plater, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

CARR.
11th December 1867.

3518. ALLEN THOMAS CARR, of Winkleigh, in the County of Devon, Gentleman, for an invention for—"An improved manure." *Provisional protection only.*

NAPIER.
11th December 1867.

3519. JAMES MURDOCH NAPIER, of York Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in apparatus or appliances for serving mustard and other condiments." *Letters Patent sealed.*

VITA.
11th December 1867.

3520. FAUSTINO VITA, of 28, Rue Feydeau, in Paris, Empire of France, Merchant, for an invention for—"A new or improved material to be employed in the manufacture of cord, rope, lace, paper, cardboard, pasteboard and other articles." *Provisional protection only.*

NICK.
11th December 1867.

3521. GEORGES HENRY NICK, of Paris, Passage Saulnier, No. 11, in the French Empire, for an invention for—"An improved sheave or pulley for ships' blocks or other purposes." *Letters Patent sealed.*

WESTON.
11th December 1867.

3522. THOMAS ALDRIDGE WESTON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in saws."—*A communication to him from abroad by Peter Cook, of Tonawanda, County of Erie, State of New York, United States of America.* *Letters Patent sealed.*

YOUNG.
12th December 1867.

3523. GEORGE ADAM YOUNG, of Eagle Street, Red Lion Square, in the County of Middlesex, Surveyor, for an invention for—"An improved curtain or screen for separating the stage from the audience part in theatres and music halls, in order to prevent the spreading of fire, also applicable to other buildings where it is desired to prevent the spreading of fire from one part of the building to another part." *Letters Patent sealed.*

GOODMAN.
12th December 1867.

3524. JOHN GOODMAN, of Loughborough, in the County of Leicester, Coach Builder, for an invention for—"Improvements in the manufacture or production of wheels used for carriages or other vehicles." *Provisional protection only.*

BUTLER.
12th December 1867.

3525. JOHN OCTAVIUS BUTLER, of the Kirkstall Forge Company, Leeds, in the County of York, for an invention for—"Improvements in securing the tyres of railway engine and carriage wheels." *Provisional protection only.*

BAILLIE. 12th December 1867.

3526. JONATHAN ROBERT BAILLIE, of 1, Rochefort Villas, Hoe Street, Walthamstow, in the County of Essex, Naval Architect, for an invention for—"Improvements in caissons." *Letters Patent sealed.*

WARD. 12th December 1867.

3527. JOHN WARD, of Port Glasgow, in the County of Renfrew, North Britain, for an invention for—"Improvements in lamps to be used under water." *Letters Patent sealed.*

ROBERTS. WILLIAMS. 12th December 1867.

3528. RICHARD ROBERTS, of Pontypridd, in the County of Glamorgan, Engineer, and PHILIP WILLIAMS, of the firm of Morgan, Williams and Company, of the same place, Engineers, for an invention for—"An improved equilibrium slide-valve for steam-engines." *Letters Patent sealed.*

BROWNHILL. 12th December 1867.

3529. ROWLAND WILLIAM BROWNHILL, of Walsall, in the County of Stafford, Manufacturer, for an invention for—"Improvements in water tuyeres for blast furnaces, smiths' fires and for other like purposes." *Letters Patent sealed.*

PAXMAN. 12th December 1867.

3530. NOAH PAXMAN, junr., of Clifton Hampden, in the County of Oxford, Farmer, for an invention for—"Improvements in steam cylinders and the peculiar arrangement of the mechanism connected therewith." *Letters Patent sealed.*

DEATH. 12th December 1867.

3531. EPHRAIM DEATH, of Leicester, in the County of Leicester, Engineer, for an invention for—"Improvements in steam pumps." *Provisional protection only.*

HANNING. KNOTT. CLERC. 12th December 1867.

3532. WILLIAM GEORGE HANNING, and GEORGE BALLANTYNE KNOTT, both of Newcastle-on-Tyne, in the County of the same Town, and LÉON CHARLES FRANÇOIS CLERC, of Saint Mary Axe, in the City of London, for an invention for—"Improvements in lamps."—*Partly their own invention and partly the result of a communication to them from abroad by François Maurel, of La Chapelle, Paris, in the Empire of France.* *Letters Patent sealed.*

COLLINGHAM. SMITH. 12th December 1867.

3533. JAMES COLLINGHAM, Worsted Spinner, and THOMAS ELLISON SMITH, Machine Maker, of the Town of Keighley, in the County of York, for an invention for—"Improvements in spinning and twisting frames, known under the denomination of 'cap frames' and 'flyer frames.'" *Letters Patent sealed.*

BAWDEN. 12th December 1867.

3534. PETER BAWDEN, of 49, Norland Square, Notting Hill, in the County of Middlesex, Brick Manufacturer, for an invention for—"Improvements in machinery for the manufacture of bricks and tiles." *Letters Patent sealed.*

SINTZENICH. 12th December 1867.

3535. EDWARD REED SINTZENICH, of Duke Street, St. James's, in the County of Middlesex, for an invention for—"Improvements in the treatment of paper and certain woven fabrics, for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes." *Letters Patent sealed.*

FIELD. 12th December 1867.

3536. HENRY FIELD, of Tulse Hill, in the County of Surrey, for an invention for—"Improvements in the manufacture of candles and in the moulds or apparatus employed therein." *Provisional protection only.*

NEWTON. 12th December 1867.

3537. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved method of manufacturing cast steel and malleable iron."—*A communication to him from abroad by Edward Louis Seymour, of the City and State of New York, United States of America.* *Provisional protection only.*

BOBY. 12th December 1867.

3538. ROBERT BOBY, of Bury St. Edmunds, in the County of Suffolk, Agricultural Implement Maker, for an invention for—"Improvements in hay-making machines, horse hoes, horse rakes and other analogous agricultural implements or machines." *Provisional protection only.*

RICHARDS. 12th December 1867.

3539. WESTLEY RICHARDS, of Birmingham, in the County of Warwick, for an invention for—"Improvements in fire-arms and cartridges." *Provisional protection only.*

ROBINSON. 12th December 1867.

3540. JAMES ROBINSON, of Dalton, near Huddersfield, for an invention for—"Improvements in the manufacture of mohair and similar fabrics." *Letters Patent sealed.*

PEPPER. TOBIN. 12th December 1867.

3541. JOHN HENRY PEPPER, of No. 61, Boundary Road, St. John's Wood, Professor of Chemistry, and THOMAS WILLIAM TOBIN, of No. 8, Old Jewry, in the City of London, Architect, for an invention for—"Improvements in apparatus used in producing scenic illusions." *Provisional protection only.*

SINTZENICH. 13th December 1867.

3542. EDWARD REED SINTZENICH, of Duke Street, St. James's, in the County of Middlesex, for an invention for—"Improvements in the treatment of gutta-percha, indian-rubber, Honduras gum and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes."—*A communication to him from abroad by Daniel Reed, of the City of New York.*

Provisional protection only.

WHITEHEAD. 13th December 1867.

3543. GEORGE WHITEHEAD, of Newcastle-on-Tyne, in the County of Northumberland, Chemist and Druggist, for an invention for—"Improvements in capsules or coverings for bottles and other like vessels." *Provisional protection only.*

JOHNSON. 13th December 1867.

3544. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of artificial fuel."—*A communication to him from abroad by Antoine Ferdinand Phillippe Auguste Gaston Decamps, Merchant, Theodore de Joly, Civil Engineer, and François Felix Chollat, Gentleman, all of Paris, in the Empire of France.*

Provisional protection only.

MARSON. 13th December 1867.

3545. GERVASE MARSON, of Eagley, near Bolton, in the County of Lancaster, for an invention for—"Certain improvements in the method of and means for retaining the outer ends of tapes, ribbons and other similar narrow fabrics and paper." *Provisional protection only.*

WILLIAMS. 13th December 1867.

3546. JAMES WILLIAMS, of Great Saughall, in the County of Chester, Schoolmaster, for an invention for—"An abacus or apparatus for imparting instruction in arithmetic, and which apparatus may be advantageously employed in teaching reading." *Provisional protection only.*

McILWRAITH. BONNER. 13th December 1867.

3547. WILLIAM McILWRAITH, and JOSEPH BONNER, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in apparatus to be applied to looms for weaving." *Letters Patent sealed.*

DAMM. 13th December 1867.

3548. LEOPOLD AUGUSTE DAMM, of Seething Lane, in the City of London, for an invention for —"Improved appliances and means for conveying salt-water fish through fresh water, and overland and on land."—*A communication to him from abroad by Adolphe Smidth, of Copenhagen, in the Kingdom of Denmark.*

Letters Patent sealed.

BULLOUGH. 13th December 1867.

3549. ADAM BULLOUGH, of Blackburn, in the County of Lancaster, Cotton Manufacturer, for an invention for —"Improvements in looms for weaving."

Letters Patent sealed.

SETTLE. 13th December 1867.

3550. JOHN GRUNDY SETTLE, of Horncastle, in the County of Lincoln, for an invention for—"Improvements in door bolts and indicators."

Letters Patent sealed.

PEBARDY. 13th December 1867.

3551. THOMAS PEBARDY, of No. 22, Greville Street, Hatton Garden, Surgical Bandage and Instrument Maker, for an invention for—"Improvements in surgical appendages, to consist of a corset and abdominal supporter combined, also to serve as a truss in cases of umbilical and ventral hernia." *Letters Patent sealed.*

NEWTON. 13th December 1867.

3552. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in bench planes and moulding tools."—*A communication to him from abroad by Nelson Palmer, of Auburn, in the State of New York, United States of America.*

Letters Patent sealed.

CHRISTOPHE. MONTIGNY. 13th December 1867.

3553. LOUIS CHRISTOPHE, and JOSEPH MONTIGNY, of Brussels, in the Kingdom of Belgium, Mechanicians, for an invention for—"An improved tubular cannon for firing vollies or charges of grape shot." *Letters Patent sealed.*

ATKINSON. 14th December 1867.

3554. HENRY ATKINSON, of 33, Wharf Road, City Road, in the County of Middlesex, for an invention for —"Improvements in gas retort ovens and furnaces."—*A communication to him from abroad by John Olof Wallin, of Stockholm, in the Kingdom of Sweeden.* *Letters Patent sealed.*

BERRY. 14th December 1867.

3555. FRANCIS BERRY, of the firm of Francis Berry and Sons, of the Calderdale Iron Works, Sowerby Bridge, Engineers and Tool Makers, for an invention for —"A self-acting metal breaker." *Provisional protection only.*

McMURDO. 14th December 1867.

3556. ARCHIBALD McMURDO, Rear-Admiral in the Royal Navy, of Cargenholm, Dumfries, for an invention for—"Improvements in apparatus for saving life from drowning." *Provisional protection only.*

SHARPLES. SCHOFIELD. 14th December 1867.

3557. JOHN SHARPLES, Shuttle Maker, and JAMES SCHOFIELD, Cabinet Maker, both of Blackburn, in the County of Lancaster, for an invention for—"Improvements in shuttles employed in weaving and in bobbins used therewith." *Provisional protection only.*

BATES. BATES. 14th December 1867.

3558. WILLIAM BATES, and FREDERICK BATES, of the firm of William Bates and Son, of Sowerby Bridge, near Halifax, in the County of York, Machine Makers and Millwrights, for an invention for—"Improvements in washing machines known as 'Dollys,' which improvements render such machines also applicable for crushing and fulling fabrics." *Letters Patent sealed.*

HARGREAVES. 14th December 1867.

3559. JAMES HARGREAVES, of Appleton-within-Widnes, in the County of Lancaster, Analytical Chemist, for an invention for—"Improvements in the manufacture of soda and potassa." *Letters Patent sealed.*

TINKLER. 14th December 1867.

3560. ROBERT TINKLER, of Penrith, Churn Manufacturer, for an invention for —"Improvements in churns." *Letters Patent sealed.*

KIDD. 14th December 1867.

3561. JOHN HOWARD KIDD, of Bangor Iscoyd, in the County of Flint, Gentleman, for an invention for—"Improvements in brattice cloth and in its manufacture." *Provisional protection only.*

CLARK. 14th December 1867.

3562. GEORGE CLARK, of No. 29, Arundel Street, Strand, in the County of Middlesex, for an invention for—"Improvements in guns, projectiles and cartridges, and in the construction of the same." *Provisional protection only.*

BENTALL. 14th December 1867.

3563. EDWARD HAMMOND BENTALL, of Heybridge, near Maldon, in the County of Essex, Agricultural Implement Manufacturer, for an invention for—"Improved apparatus for controlling the draught of water from constant supply pipes." *Letters Patent sealed.*

PARSON. 14th December 1867.

3564. THOMAS COOKE PARSON, junior, of the City and County of Bristol, Surgeon Dentist, for an invention for—"Improvements in skates." *Provisional protection only.*

HOLLINGWORTH. 14th December 1867.

3565. OLLIVE HOLLINGWORTH, of 69, Pilgrim Street, Newcastle-on-Tyne, Civil Engineer, for an invention for—"Improvements in feeding furnaces for prevention of smoke and economizing fuel." *Provisional protection only.*

CLARK. 14th December 1867.

3566. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction."—*A communication to him from abroad by Armand Coste and Louis Taupin de Rosnay, Merchants, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

TATHAM. TATHAM. 14th December 1867.

3567. EDMUND TATHAM, and AMOS TATHAM, both of the Town and County of the Town of Nottingham, Manufacturers, for an invention for—"Improvements in the manufacture of sinkers for hosiery and other machines." *Letters Patent sealed.*

RIMMEL. 14th December 1867.

3568. EUGENE RIMMEL, of the Strand, in the City of Westminster, Perfumer, for an invention for—"An improved construction of portable fountain." *Provisional protection only.*

LUND. 14th December 1867.

3569. LAURENTIUS ANDREAS WALDEMAR LUND, of Chandos Street, Saint Martin's, in the County of Middlesex, for an invention for—"Improvements in studs, stud-buttons and solitaires." *Letters Patent sealed; specification filed by order.*

CONISBEE. 14th December 1867.

3570. WILLIAM CONISBEE, of 39 and 40, Herbert's Buildings, Waterloo Road, in the County of Surrey, for an invention for—"Improvements in cylindrical chromo-lithographic and typographic printing machines." *Letters Patent sealed.*

BOOTH. BOOTH. BOOTH. 16th December 1867.

3571. JOSEPH BOOTH, JOHN BOOTH, and JEREMIAH BOOTH, all of Rodley, near Leeds, in the County of York, Engineers and Millwrights, for an invention for —"Improvements in means or apparatus for effecting the cutting or dressing of stone." *Letters Patent sealed.*

GWYNNE.
16th December 1867.

3572. JAMES EGLINTON ANDERSON GWYNNE, of Essex Street Works, Strand, in the County of Middlesex, Engineer, for an invention for—"Improvements in sinking tubes or cylinders for obtaining and raising water, and in the apparatus for effecting the same." *Provisional protection only.*

HUSKISSON.
16th December 1867.

3573. WILLIAM HUSKISSON the younger, of 76, Swinton Street, Gray's Inn Road, in the County of Middlesex, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of soda and other ærated waters, and in the manufacture of ærated bread." *Provisional protection only.*

DAWSON.
16th December 1867.

3574. JAMES DAWSON, of Greenock, in the County of Renfrew, North Britain, Engineer and Sugar Refiner, for an invention for—"Improvements in treating sugar syrup." *Provisional protection only.*

SHACKLETON.
16th December 1867.

3575. JAMES MORPETH SHACKLETON, of Accrington, in the County of Lancaster, Cotton Manufacturer, for an invention for—"Improvements in the manufacture of umbrellas." *Provisional protection only.*

KITTOE.
16th December 1867.

3576. GEORGE DOMINICUS KITTOE, of Clerkenwell, in the County of Middlesex, Engineer, for an invention for—"Improvements in engines actuated by air, steam or other fluids." *Provisional protection only.*

KERR.
16th December 1867.

3577. WILLIAM HENRY KERR, of Clontarf, in the County of Dublin, Ireland, China Merchant, for an invention for—"Improvements in the preparation of material to be used in the manufacture of porcelain and pottery." *Letters Patent sealed.*

JACKSON.
DYER.
16th December 1867.

3578. WILLIAM JACKSON, and JOSEPH DYER, of Birmingham, in the County of Warwick, for an invention for—"Improvements in the construction of valves and valve cocks." *Provisional protection only.*

BERNIERI.
16th December 1867.

3579. MAJOR CHEVALIER CESARE BERNIERI, of 50, Claverton Street, Pimlico, in the County of Middlesex, for an invention for—"An improved patent invulnerable cloth armour." *Provisional protection* NOT *granted.*

STANDFIELD.
16th December 1867.

3580. JAMES STANDFIELD, of Betchworth, in the County of Surrey, for an invention for—"Improvements in the means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers, and kilns for the manufacture of bricks and lime." *Letters Patent sealed.*

HUSKISSON.
16th December 1867.

3581. WILLIAM HUSKISSON the younger, of 76, Swinton Street, Gray's Inn Road, in the County of Middlesex, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of bicarbonate of potash and soda." *Letters Patent sealed.*

HALEY.
HODGSON.
17th December 1867.

3582. NOBLE HALEY, and JOHN HODGSON, of Bradford, in the County of York, Machine Makers, for an invention for—"Improvements in machinery for twisting or doubling wool, silk, cotton or other fibrous substances, part of which is also applicable to machinery for spinning such substances." *Provisional protection only.*

MACKINTOSH.
17th December 1867.

3583. THOMAS VOLKERT MACKINTOSH, of Surinam, but at present residing at Port Glasgow, in the County of Renfrew, North Britain, for an invention for—"Improvements in machines for making drains or trenches." *Letters Patent sealed.*

SHRIMPTON.
17th December 1867.

3584. ALFRED SHRIMPTON, of the firm of Alfred Shrimpton and Sons, of Redditch, in the County of Worcester, Needle and Fish Hook Manufacturers, for an invention for—"Improvements in papering needles or making up packets of needles for sale." *Letters Patent sealed.*

SIMONS.
CARMICHAEL.
17th December 1867.

3585. WILLIAM SIMONS, and ARCHIBALD CARMICHAEL, both of the Town and County of Renfrew, North Britain, for an invention for—"Improvements in moulding and in the machinery or apparatus employed therefor." *Letters Patent sealed.*

ROSS.
LONG.
17th December 1867.

3586. WILLIAM ROSS, of No. 1, Grove Street, Walworth, and ALFRED LONG, of No. 3, Aylesbury Terrace, Walworth, both in the County of Surrey, for an invention for—"Improvements in means for preventing and removing incru tion in steam-boilers." *Provisional protection only.*

DU BOYS.
17th December 1867.

3587. ERNEST MARIE DU BOYS, Government Engineer, of Paris, France, for an invention for—"Improvements in liquid meters or apparatus for measuring and registering the volume of water or other liquid flowing under pressure through pipes or ducts." *Letters Patent sealed.*

MARSTERS. 17th December 1867.

3588. SADDLETON MARSTERS, of the firm of John Marsters and Sons, of Lynn, in the County of Norfolk, for an invention for—"A new or improved machine for rubbing, washing and sizing ropes, cords or twines." *Letters Patent sealed.*

HANCOCK. HANCOCK. 17th December 1867.

3589. FREDERICK LAMB HANCOCK, and CHARLES LAMB HANCOCK, both of Dudley, in the County of Worcester, for an invention for—"Improvements in and connected with propellers and in arrangements for propelling vessels." *Letters Patent sealed.*

GILBEE. 17th December 1867.

3590. WILLIAM ARMAND GILBEE, trading under the name or style of L'de Fontainemoreau, of the General Patent Office, 4, South Street, Finsbury, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the method of and apparatus for raising water."—*A communication to him from abroad by Jan Barend Hendrik Van Royen, of Gorinchem, in the Kingdom of Holland.* *Letters Patent sealed.*

NEWTON. 17th December 1867.

3591. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved method of and apparatus for the manufacture of tinned leaden pipes."—*A communication to him from abroad by Augustin Henry Hamon, of Nantes, in the Empire of France.* *Letters Patent sealed.*

GREEN. 18th December 1867.

3592. HENRY GREEN, of Preston, in the County of Lancaster, Gas Engineer, for an invention for—"Improvements in furnaces for steam-boilers and other purposes." *Provisional protection only.*

VAILE. 18th December 1867.

3593. WILLIAM VAILE, of 41, Uxbridge Street, Newington Causeway, in the County of Surrey, Gentleman, for an invention for—"Improvements in the application of stereotyped and electrotyped editorial and other literary compositions, articles, compilations, paragraphs and advertizements manufactured in one locality or town, for the purpose of printing from the same on sheets of paper to form newspapers, magazines, serial and other periodical publications or works, or parts of such said publications, in another locality or town, and in the conveyance therefrom and thereto of such stereotyped and electrotyped editorial and other literary compositions, articles, essays, compilations, reproductions, paragraphs and advertizements, and in the arrangement and intermixture of such stereotyped and electrotyped editorial and other literary compositions, articles, compilations, paragraphs and advertizements so conveyed, with ordinary types, compositions in presses, and printing therefrom on paper to form newspapers, magazines, serial and other periodical publications or works when conveyed from one county or town to another." *Provisional protection* NOT *granted.*

DWYER. 18th December 1867.

3594. ROBERT DOYNE DWYER, of Liverpool, in the County of Lancaster, for an invention for—"Improvements applicable to metallic bedsteads and matrasses." *Provisional protection only.*

PATTERSON. 18th December 1867.

3595. JOHN PATTERSON, of Hull, in the County of York, Engineer, for an invention for—"Improvements in capstans." *Provisional protection only.*

MURRAY. 18th December 1867.

3596. JOHN MURRAY, of Whitehall Place, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction of roads or streets." *Provisional protection only.*

COMFIELD. 18th December 1867.

3597. THOMAS COMFIELD the younger, of Queen's Road, Buckhurst Hill, Chigwell, in the County of Essex, for an invention for—"Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes." *Provisional protection only.*

PRESTON. WALKER. 18th December 1867.

3598. WILLIAM PRESTON, and CHARLES WALKER, of Dewsbury, in the County of York, Overlookers, for an invention for—"Improvements in machinery known as the condenser carder." *Provisional protection only.*

HALL. 18th December 1867.

3599. JAMES HALL, of Barrhead, in the County of Renfrew, North Britain, for an invention for—"Improvements in furnace grates and casings."—*A communication to him from abroad by Robert Loudon Walker, residing at Globe Village, Massachusetts, United States of America.* *Letters Patent sealed.*

COCKSHOOT. 18th December 1867.

3600. JOSEPH COCKSHOOT, junior, of Manchester, in the County of Lancaster, for an invention for—"Certain improvements in the manufacture and construction of carriages, landaus and other similar vehicles." *Letters Patent sealed.*

BONNEVILLE. 18th December 1867.

3601. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 38, Porchester Terrace, Bayswater, in the County of Middlesex, and 24, Rue du Mont Thabor, Paris, in the Empire of France, Patent Agent, for an invention for—"An improved apparatus to manufacture the rims of hats."—*A communication from Jean Prosper Morlot, a person resident at Paris aforesaid, Boulevart de Sebastopol, 72.* *Provisional protection only.*

COLLINS. 18th December 1867.

3602. MICHAEL HENRY COLLINS, of the State of Massachusetts, of the United States of America, for an invention for—"An improved lamp." *Complete specification; Letters Patent sealed.*

HÉBERT. 18th December 1867.

3603. ONÉSIME ARISTIDE HÉBERT, of New Millman Street, in the County of Middlesex, Watchmaker, for an invention for—"Improvements in musical boxes." *Letters Patent sealed.*

MURDOCH. 18th December 1867.

3604. HUNTER HENRY MURDOCH, of No. 7, Staple Inn, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in means or apparatus for propelling canal boats and other vessels, parts of which improvements are applicable to other purposes."—*A communication to him from abroad by Baron Oscar de Mesnil, of Brussels, in the Kingdom of Belgium, Gentleman, and Max Eyth, of Stuttgart, Wurtemberg, Civil Engineer.* *Letters Patent sealed.*

BELLHOUSE. 19th December 1867.

3605. EDWARD TAYLOR BELLHOUSE, of the Eagle Foundry, in the City of Manchester, Engineer, for an invention for—"Improvements in the construction of fire-proof floors for buildings." *Provisional protection only.*

ELLIS. 19th December 1867.

3606. GEORGE HENRY ELLIS, of No. 8. Outram Road, Addiscombe, in the County of Surrey, Engineer, for an invention for—"Improvements in apparatus for cleaning boots and shoes." *Provisional protection only.*

HUBBARD. 19th December 1867.

3607. WILLIAM ALEXANDER HUBBARD, of Ramsgate, in the County of Kent, Gentleman, for an invention for—"Improved proportional compasses and dividers." *Provisional protection only.*

GISBORNE. 19th December 1867.

3608. JOHN SACHEVERELL GISBORNE, of Liverpool, in the County of Lancaster, Electrical Engineer, for an invention for—"Improvements in electric telegraphic apparatus, and in the symbols or characters connected with the transmission of messages by electric telegraphs." *Letters Patent sealed.*

BECKER. 19th December 1867.

3609. LEWIS MATTHEWS BECKER, of No. 2, Guildhall Chambers, Basinghall Street, in the City of London, Telegraphic Engineer, for an invention for—"Improvements in the arrangement of electric telegraph and other wires and the apparatus employed or connected therewith, and in laying and supporting wires for telegraphic or other purposes." *Letters Patent sealed.*

ATKINS. 19th December 1867.

3610. JAMES ATKINS, of the firm of Robert Walter Winfield and Company, of Birmingham, in the County of Warwick, Merchants and Manufacturers, for an invention for—"Improvements in metallic bedsteads, cots and couches." *Letters Patent sealed.*

CLAY. 19th December 1867.

3611. JOHN CLAY, of Yardley, in the County of Worcester, Saddler, for an invention for—"Improvements in saddles." *Letters Patent sealed.*

COCHRAN. 19th December 1867.

3612. ALEXANDER COCHRAN, of the firm of Cochran and Hay, of Kirktonfield, in the County of Renfrew, North Britain, Bleachers and Dyers, for an invention for—"Improvements in machinery for finishing woven fabrics." *Letters Patent sealed.*

BREFFIT. 19th December 1867.

3613. EDGAR BREFFIT, of Castleford, in the southern division of the West Riding of the County of York, for an invention for—"Improvements in glass bottle house pot carriages, and implements used in setting glass bottle house pots, which invention admits of improvements in the construction of furnaces for melting bottle or other glass in open pots." *Letters Patent sealed.*

RICHARDSON. 19th December 1867.

3614. WILLIAM HADEN RICHARDSON, of Glasgow, in the County of Lanark, North Britain, for an invention for—"An improved apparatus to be employed in the manufacture of iron and steel." *Letters Patent sealed.*

CHAUNCY. 19th December 1867.

3615. REGINALD CHAUNCY, of 3, Clyde Street, Brompton, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the preparation of a substitute for emery paper." *Provisional protection only*

KERR.
19th December 1867.

3616. JAMES KERR, of 36, King William Street, in the City of London, Gun Maker, for an invention for—"Improvements in breech-loading fire-arms."
Letters Patent sealed.

SIMMONS.
19th December 1867.

3617. JOSEPH SIMMONS, of Ravenscourt Park, Hammersmith, in the County of Middlesex, for—"An invention for the purpose of producing an optical illusion of apparently beheading or otherwise dismembering a human being."
Provisional protection only.

PULLAR.
19th December 1867.

3618. WILLIAM BLACK PULLAR, of 22, Bread Street, in the City of London, for an invention for—"Improvements in the manufacture of fabrics to be made into skirts." *Provisional protection only.*

BECK.
19th December 1867.

3619. CHARLES BECK, of 4, Queen Street, Cheapside, in the City of London, for an invention for—"Improvements in joining horn and whalebone."
Provisional protection only.

MONSON.
19th December 1867.

3620. BENJAMIN MONSON, of Colchester, in the County of Essex, for an invention for—"Improved apparatus for sliding the sash frames of windows and for sliding shutters." *Provisional protection only.*

BONNEVILLE.
20th December 1867.

3621. HENRI ADRIEN BONNEVILLE, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, and 38, Porchester Terrace, Bayswater, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in machinery for carding and spinning wool and other fibrous materials."—*A communication from Celestin Martin, a person resident at Pépinster Verviers, in the Kingdom of Belgium.* *Letters Patent sealed.*

DAVIES.
20th December 1867.

3622. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 87, St. Vincent Street, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in circular knitting machines."—*A communication to him from abroad by George Johnstone, of Philadelphia, Pennsylvania, United States of America.* *Letters Patent sealed.*

FIELD.
WARREN.
20th December 1867.

3623. EDWARD FIELD, of Chandos Chambers, Adelphi, in the City of Westminster, Consulting Engineer, and FREDERIC PELHAM WARREN, of Norwood, in the County of Surrey, Commander in the Royal Navy, for an invention for—"An improved cowl for chimney tops." *Provisional protection only.*

TOWER.
20th December 1867.

3624. LEVI LINCOLN TOWER, of the State of Massachusetts, of the United States of America, for an invention for—"Improvements in faucets and apparatus for measuring liquids."—*A communication to him by Arthur Gates Wilson (late of Chicago, in the State of Illinois, but now resident at New York, in the State of New York, of the said United States).* *Complete specification; Letters Patent sealed.*

ENGEL.
21st December 1867.

3625. BERNARD ENGEL, of 28, Lawrence Lane, Cheapside, London, in the County of Middlesex, Merchant, for an invention for—"A new and improved composition for extracting ink and iron mould from linen and woollen fabrics."—*A communication to him from abroad by Lewis Alexandre de Lobo d'Herlen, of Boulogne-sur-Mer.* *Provisional protection only.*

KERSHAW.
21st December 1867.

3626. JOHN THOMAS KERSHAW, Surveyor, of No. 90, St. Paul's Road, Islington, in the County of Middlesex, for an invention for—"An improved ventilator."
Complete specification; protection for SIX *months only.*

KENYON.
21st December 1867.

3627. JAMES KENYON, of Blackburn, in the County of Lancaster, Cotton Manufacturer, for an invention for—"Improvements in apparatus for boiling size."
Letters Patent sealed.

LORD.
21st December 1867.

3628. EDWARD LORD, of Todmorden, in the County of York, Machine Maker, for an invention for—"An improved mode of reducing the friction of revolving and sliding surfaces." *Letters Patent sealed; no specification filed.*

DE BERGUE.
DREDGE.
21st December 1867.

3629. CHARLES DE BERGUE, of 10, Strand, in the City of Westminster, Engineer, and WILLIAM DREDGE, of Buckingham Street, Strand, in the said City, Civil Engineer, for an invention for—"Improvements in the construction of and mode or modes of connecting and working railway carriages or trains."
Provisional protection only.

WALKER.
HOLT.
21st December 1867.

3630. WILLIAM WALKER, of Rochdale, in the County of Lancaster, and EDWARD HOLT, of Newton Heath, in the same County, for an invention for—"Improvements in direct acting double action steam pumps." *Provisional protection only.*

BROWNE.
21st December 1867.

3631. BENJAMIN BROWNE, of 49, King William Street, in the City of London, Civil Engineer and Patent Agent, for an invention for—"Improvements in the construction of camp or folding bedsteads."—*A communication to him from abroad by Robert Clegg, of* 40, *Boulevard de Sebastopol, in the Empire of France.*
Provisional protection only.

HADLEY.
21st December 1867.

3632. JONAH HADLEY, of the City Flour Mills, Upper Thames Street, in the City of London, for an invention for—"Improved apparatus for cleaning grain or seeds and reducing the same to meal or flour." *Letters Patent sealed.*

DAVIDSON.
21st December 1867.

3633. JAMES DAVIDSON, of Woolwich, in the County of Kent, for an invention for—"Improved machinery for manufacturing central fire cartridges."
Letters Patent sealed.

HURST.
WILSON.
21st December 1867.

3634. WILLIAM HURST, of Hamer Hall, Rochdale, in the County of Lancaster, Cotton Spinner, and JOSHUA HENRY WILSON, of Cornholme Mill, near Todmorden, in the same County, Bobbin Manufacturer, for an invention for—"Improvements in or applicable to flyer, throstle and doubling frames and machines of like character."
Provisional protection only.

WILSON.
21st December 1867.

3635. CHARLES GEORGE WILSON, of Regent's Park, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery for pressing cotton and for crushing and pressing other substances, the said machinery being adaptable for locomotion on railways or on common roads." *Letters Patent sealed.*

LUDLOW.
LUDLOW.
21st December 1867.

3636. EDWIN LUDLOW, of Birmingham, in the County of Warwick, Manufacturer, and ALFRED LUDLOW, of Birmingham aforesaid, Manufacturer, for an invention for—"Improvements in machinery for the manufacture of cartridge cases."
Letters Patent sealed.

DAVISON.
21st December 1867.

3637. JAMES DAVISON, of Bishopswearmouth, in the County of Durham, for an invention for—"Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains." *Letters Patent sealed.*

PICK.
21st December 1867.

3638. IGNAC PICK, of No. 5, Falcon Square, in the City of London, for an invention for—"Improvements in the construction of bags, portmanteaus and other similar articles." *Provisional protection only.*

TONGUE.
21st December 1867.

3639. JOHN GARRETT TONGUE, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of pomade for the human hair."—*A communication to him from abroad by Aimé Désiré Lavandier, of Paris, in the Empire of France.* *Provisional protection only.*

ROWE.
23rd December 1867.

3640. JOHN ROWE, of Wrexham, in the County of Denbigh, North Wales, Civil Engineer, for an invention for—"Improvements in the construction of miners' safety lamps." *Letters Patent sealed.*

DIXON.
BROWN.
23rd December 1867.

3641. WILLIAM DIXON, of 30, Maple Street, Newcastle-on-Tyne, Engineer, and WILLIAM BROWN, of 8, De Gray Street, Newcastle-on-Tyne, Engineer, for an invention for—"An elastic coupling for the prevention of sudden or undue strains upon ropes or chains when used in towing, hauling or lifting." *Provisional protection only.*

LANCASTER.
23rd December 1867.

3642. CHARLES WILLIAM LANCASTER, of New Bond Street, in the County of Middlesex, Gun Maker, for an invention for—"Improvements in the construction of cannon and other fire-arms." *Letters Patent sealed.*

URQUHART.
LINDSAY.
23rd December 1867.

3643. WILLIAM WALTON URQUHART, and JOSEPH LINDSAY, of Dundee, in the County of Forfar, North Britain, Engineers, for an invention for—"Improvements in machinery for softening jute, hemp and similar fibrous materials."
Letters Patent sealed.

CRAWSHAW.
23rd December 1867.

3644. ROBERT CRAWSHAW, of Colne, in the County of Lancaster, Shuttle Peg Maker, for an invention for—"Improvements in shuttles for looms for weaving."
Provisional protection only.

WALKER.
23rd December 1867.

3645. WILLIAM WALKER, of Liverpool, in the County of Lancaster, Consulting Engineer and Patent Agent, for an invention for—"Improvements in cotton ties used for banding or baling cotton and other substances."—*A communication to him from abroad by John T. Butler, of Natchez, in the State of Mississippi, one of the United States of America.* *Complete specification; Letters Patent sealed.*

BENGOUGH. 23rd December 1867.

3646. HENRY FREDERICK BENGOUGH, of Clifton, in the County of Gloucester, for an invention for—"Improvements in tobacco pipes." *Provisional protection only.*

ADAMS. 23rd December 1867.

3647. CHARLES JOHN ADAMS, of Stockton-on-Tees, in the County of Durham, Architect, for an invention for—"A self-acting fire alarm and extinguisher." *Letters Patent sealed.*

SALTER. 23rd December 1867.

3648. SIMON SALTER, of Stroud, in the County of Gloucester, for an invention for—"Improvements in the construction of rotary engines." *Provisional protection only.*

DAWKINS. 23rd December 1867.

3649. JONAS DAWKINS, of Pembroke, in the County of Pembroke, Tanner and Currier, for an invention for—"Improvements in tanning and in the apparatus to be employed therein." *Letters Patent sealed.*

CHASE. 23rd December 1867.

3650. WILLIAM HENRY CHASE, junior, of Brixton Hill, in the County of Surrey, Manufacturer, for an invention for—"Improvements in the construction of couplings for driving belts." *Provisional protection only.*

RICE. 23rd December 1867.

3651. MATTHEW JAMES RICE, of the firm of Matthew James Rice and Company, Engineers, of Sherlock Street, Birmingham, in the County of Warwick, for an invention for—"Improvements in machinery for cutting and heading nails." *Letters Patent sealed.*

ABEL. 24th December 1867.

3652. FREDERICK AUGUSTUS ABEL, of the Royal Arsenal, Woolwich, in the County of Kent, for an invention for—"Improvements in the production of explosiv compounds." *Letters Patent sealed.*

MYERS. 24th December 1867.

3653. SAUL MYERS, of Saint George's Road, Kilburn, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for roasting coffee."—*A communication to him from abroad by Charles Gustavus Mueller, of Hanover, in the Kingdom of Prussia.* *Provisional protection only.*

BURLEY. GLASSON. 24th December 1867.

3654. WILLIAM BURLEY, and WILLIAM HENRY GLASSON, both of Landport, in the County of Southampton, for an invention for—"Improvements in the construction and arrangement of plummer blocks and bearings for propeller shafts and other analogous purposes." *Provisional protection only.*

TRANCHAT. 24th December 1867.

3655. PAUL FRANÇOIS TRANCHAT, Engineer, of 13, Rue Gaillon, Paris, in the Empire of France, for an invention for—"An universal machine for manufacturing circular cutters and milling tools of any form or outline, with either a rectangular or a helicoidal direction of cut." *Letters Patent sealed.*

POTTINGER. 24th December 1867.

3656. CHRISTOPHER POTTINGER, of Anstruther, in the County of Fife, North Britain, Shipbuilder, for an invention for—"Improvements in motive-power engines, part of which improvements are applicable to the arrangement and construction of pumps for raising and forcing liquids, fluids and other substances generally." *Provisional protection only.*

CLARK. 24th December 1867.

3657. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"An improved colouring matter chiefly applicable for dyeing and printing purposes."—*A communication to him from abroad by Jean Théodore Coupier, Chemist, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

DEMEURE. 24th December 1867.

3658. PIERRE DEMEURE, of 76, Rue Croix Nivers (Grenelle), Paris, in the Empire of France, Mechanician, for an invention for—"An improved railway carriage-break." *Provisional protection only.*

LAYTON. 24th December 1867.

3659. GEORGE LAYTON, of Liverpool, in the County of Lancaster, Gentleman for an invention for—"An improvement in the manufacture of soap." *Provisional protection only.*

RENDER. 24th December 1867.

3660. FREDERICK RENDER, of Manchester, in the County of Lancaster, Corn Merchant, for an invention for—"Improvements applicable to traps for pigeon and other shooting." *Letters Patent sealed.*

HARBISON. 24th December 1867.

3661. THOMAS HARBISON, of New York, in the United States of America, bu now residing at Manchester, in the County of Lancaster, England, for an invention for—"Improvements in rails for railways." *Provisional protection only.*

NEWTON.
24th December 1867.

3662. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved alcoholmeter or instrument for ascertaining the alcoholic strength of liquids."—*A communication to him from abroad by Basil Rakowitsch, of the Imperial Russian Navy, St. Petersburg, Russia.* *Letters Patent sealed.*

ADDIE.
KOHN.
24th December 1867.

3663. JAMES ADDIE, of the Langloan Iron Works, Coatbridge, in the County of Lanark, Ironmaster, and FERDINAND KOHN, of Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements relating to blast and cupola furnaces." *Letters Patent sealed.*

ALLSHORN.
24th December 1867.

3664. GEORGE EDWARD ALLSHORN, late of 140, Princes Street, Edinburgh, and now of 7, Ludgate Hill, in the City of London, M.D., M.R.C.S., for an invention for—"Improvements in the manufacture of artificial fuel." *Letters Patent sealed.*

LENNARD.
LENNARD.
24th December 1867.

3665. SAMUEL LENNARD, of Newark Street, Leicester, and FREDERICK LENNARD, of Belgrave Gate, Leicester, for an invention for—"Improvements in the manufacture of warp fabrics." *Letters Patent sealed.*

HEWITT.
24th December 1867.

3666. WILLIAM HEWITT, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—Improvements in holders for holding or gripping reins, whips and other articles." *Letters Patent sealed.*

HINDE.
HINDE.
24th December 1867.

3667. GEORGE JAMES HINDE, of Wolverhampton, in the County of Stafford, Manager of Works, and THOMAS CALLENDER HINDE, of Ynispenllwch, near Swansea, in the County of Glamorgan, Colliery Proprietor, for an invention for—"Improvements in the manufacture of iron and steel, and in furnaces and apparatus used in the said manufacture." *Letters Patent sealed.*

LIGHTFOOT.
26th December 1867.

3668. JOHN LIGHTFOOT, of Lower House, near Burnley, in the County of Lancaster, Chemist, for an invention for—"Improvements in printing certain textile fabrics and yarns." *Letters Patent sealed.*

GREENHALGH.
SHAW.
MALLISON.
26th December 1867.

3669. NATHANIEL GREENHALGH, of Sharples, Cotton Spinner, WILLIAM SHAW, of Heaton, Cotton Spinner, and JAMES MALLISON, of Halliwell, Yarn Agent, all in the County of Lancaster, for an invention for—"Improvements in steaming certain yarns and in apparatus employed therein." *Letters Patent sealed.*

BOWEN.
BOWEN.
26th December 1867.

3670. BENJAMIN BOWEN, and JAMES BENJAMIN BOWEN, both of Chipping Norton, in the County of Oxford, for an invention for—"Improvements in the manufacture of gloves." *Letters Patent sealed.*

JETOT.
CROS.
DE JABRUN.
26th December 1867.

3671. ERNEST CHARLES JETOT, and EMILE HORTENSIUS CHARLES CROS, and MARIE MARGUERITE AIMÉE D'EIMAR DE JABRUN, all of Paris, Rue Royale St. Honoré, No. 14, in the French Empire, for an invention for—"A hat protector or apparatus for preserving hats and caps from rain, dust or otherwise." *Provisional protection only.*

RAFER.
RAFER.
27th December 1867.

3672. EUGÈNE GERMAIN RAFER, and ERNEST EDMOND RAFER, of No. 31, Rue d'Enghien, at Paris, in the Empire of France, for an invention for—"An improved braiding machine." *Letters Patent sealed.*

EDGE.
27th December 1867.

3673. JONATHAN EDGE, of the Tipping Iron Works, Bolton-le-Moors, in the County of Lancaster, Engineer, for an invention for—"Improvements in the 'rag-rolls' or 'beaters' of 'rag-engines,' 'beating-engines' or other similar machinery employed in the manufacture of paper." *Letters Patent sealed.*

HUGHES.
27th December 1867.

3674. EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics."—*A communication to him from abroad by Seth William Baker, of Providence, Rhode Island, United States of America.* *Letters Patent sealed.*

ELLIS.
27th December 1867.

3675. TRISTIE JAMES ELLIS, of Abingdon Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in the construction and arrangement of apparatus for carburetting gas and atmospheric air." *Provisional protection only.*

COCKSHOOT.
WEATHERILL.
27th December 1867.

3676. JOSEPH COCKSHOOT, junr., of Manchester, in the County of Lancaster, Coach Builder, and HENRY WEATHERILL, of the same place, Manager, for an invention for—"Certain improvements in railway breaks." *Letters Patent sealed.*

ROWAN.
27th December 1867.

3677. JOHN MARTIN ROWAN, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in moulds or apparatus to be used in casting steel." *Letters Patent sealed.*

STEELE.
27th December 1867.

3678. DAVID STEELE, of Farnworth, in the County of Lancaster, Manufacturer, for an invention for—"Improvements in apparatus for heating and agitating liquid or fluid substances." *Provisional protection only.*

HIGGINS.
WHITWORTH.
27th December 1867.

3679. HENRY HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvements in machinery for preparing, spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

CLARKE.
27th December 1867.

3680. JOHN CLARKE, of Redditch, in the County of Worcester, Needle Manufacturer, for an invention for—"Improvements in wrappers or envelopes for needles." *Letters Patent sealed.*

NEWTON.
27th December 1867.

3681. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in soles for boots and shoes."—*A communication to him from abroad by John Chilcott, of Brooklyn, in the State of New York, United States of America.* *Provisional protection only.*

LEWIS.
27th December 1867.

3682. JOHN WILLIAM LEWIS, of the Town and County of Newcastle-upon-Tyne, Engineer, for an invention for—"Improvements in warming, ventilating and heating apartments or buildings, and in the arrangement of apparatus connected therewith." *Letters Patent sealed.*

DUNN.
LIDDELL.
27th December 1867.

3683. ANDREW DUNN, of the firm of Brown and Company, of White Street, in the Borough of Southwark, and ALEXANDER LIDDELL, Foreman, in the employment of the said firm, for an invention for—"Improvements in the manufacture of metallic casks or vessels." *Provisional protection only.*

BROOMAN.
27th December 1867.

3684. CLINTON EDGCUMBE BROOMAN, of the firm of Robertson, Brooman and Company, of 166, Fleet Street, in the City of London, Patent Agents, for an invention for—"Improvements in the application of electricity to clocks, watches and other time-keepers, and in the apparatus employed therein."—*A communication to him from abroad by Theodore Auguste Marie Sortais, of Lisieux, France.* *Provisional protection only.*

GOODFELLOW.
28th December 1867.

3685. JACOB GOODFELLOW, of the Atlas Works, Blackburn, in the County of Lancaster, Engineer, for an invention for—"Improvements in metallic pistons for steam cylinders, air cylinders or pumps." *Letters Patent sealed.*

CAPPER.
28th December 1867.

3686. JASPER CAPPER, of Birkenhead, in the County of Chester, Accountant, for an invention for—"Improvements in the construction of chimney tops or caps." *Provisional protection only.*

FRYER.
28th December 1867.

3687. WILLIAM FRYER, of Birmingham, in the County of Warwick, Plumber, for an invention for—"Improvements in self-closing taps." *Provisional protection only.*

NEWTON.
28th December 1867.

3688. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the mode of and machinery for making shot and shells for ordnance."—*A communication to him from abroad by John Blake Tarr, of Fair Haven, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

NEWTON.
28th December 1867.

3689. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in butt hinges."—*A communication to him from abroad by Benjamin Franklin Barker, of San Francisco, California, United States of America.* *Letters Patent sealed.*

NEWTON.
28th December 1867.

3690. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in motors or apparatus for generating motive-power, and in the method of applying the same to produce useful effect."—*A communication to him from abroad by Benjamin Talbot Babbitt, of the City and State of New York, United States of America.* *Letters Patent sealed.*

MORFIT.
28th December 1867.

3691. CAMPBELL MORFIT, of New York, in the United States of America, but at present residing at Sudbrook Park, in the County of Surrey, for an invention for—"Improvements in means or apparatus for cutting soap."
Provisional protection only.

HOWARTH.
28th December 1867.

3692. RICHARD HOWARTH, of 35, Southampton Buildings, in the County of Middlesex, for an invention for—"Improvements in carriages, railway trucks and other vehicles." *Provisional protection only.*

HASLUCK.
28th December 1867.

3693. LEWIS HASLUCK, of 254, Tottenham Court Road, in the County of Middlesex, Watch Maker, for an invention for—"A mechanical tell-tale alarm pointing and reporting clock." *Provisional protection only.*

EVANS.
28th December 1867.

3694. EDWARD EVANS, of Peacock Street, High Street, Newington Butts, in the County of Surrey, for an invention for—"Improvements in the construction of the sash frames and boxings of windows and shutters, and in the mode of hanging the sashes of windows." *Provisional protection only.*

JOWETT.
28th December 1867.

3695. JOHN JOWETT, of Parkhead, in the County of Lanark, North Britain, for an invention for—"Improvements in furnaces." *Provisional protection only.*

CHURCHILL.
28th December 1867.

3696. CHARLES CHURCHILL, of Norwood, in the County of Surrey, Merchant, for an invention for—"An improved gas-burner."—*A communication to him from abroad by Willis Churchill, of the City and State of New York, United States of America.* *Provisional protection only.*

GOWEN.
30th December 1867.

3697. JOHN EMERY GOWEN, of the Langham Hotel, Portland Place, London, in the County of Middlesex, for an invention for—"An improved mode of and means for raising sunken vessels." *Letters Patent sealed.*

FOTHERGILL.
30th December 1867.

3698. RICHARD FOTHERGILL, of Abernant House, Aberdare, in the County of Glamorgan, for an invention for—"Improvements in the process of and apparatus for producing heat by the combustion of fuel, for metallurgical and other operations where heat is required, and in the means for utilizing the waste heat from blast furnaces." *Provisional protection only.*

ROBERTSHAW.
ROBERTSHAW.
GREENWOOD.
30th December 1867.

3699. THOMAS ROBERTSHAW, and JONAS ROBERTSHAW, of Ovenden, near Halifax, in the County of York, Spinners and Manufacturers, and JAMES GREENWOOD, of the same place, Overlooker, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

KENDRICK.
WOOLDRIDGE.
30th December 1867.

3700. WALTER KENDRICK, and JOB WOOLDRIDGE, of West Bromwich, in the County of Stafford, Iron Founders, for an invention for—"Improvements in apparatus for consuming or preventing the formation of smoke in steam-boiler and other furnaces." *Provisional protection only.*

GLOVER.
30th December 1867.

3701. GEORGE GLOVER, of Ranelagh Road, Pimlico, in the County of Middlesex, for an invention for—"Improvements in lamps or apparatus for burning naphtha, benzole and similar liquids, to represent a candle."—*A communication to him from abroad by Laslo Chandor, of St. Petersburg, in the Empire of Russia.*
Letters Patent sealed.

DAVISON.
30th December 1867.

3702. JAMES DAVISON, of Bishopswearmouth, in the County of Durham, for an invention for—"Improvements in furnaces for smelting glass or the materials employed therein, and for consuming smoke." *Letters Patent sealed.*

ASCHERMANN.
30th December 1867.

3703. JOSEPH ASCHERMANN, of Paris, France, Manufacturer, for an invention for—"An improved machine for cutting the hair or fur from skins, for hat-making and for the manufacture of felt." *Letters Patent sealed.*

CLARK.
30th December 1867.

3704. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in the permanent way of railways."—*A communication to him from abroad by Thomas Roberts, Civil Engineer, of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*

GRAINGER.
30th December 1867.

3705. ALFRED GRAINGER, of Lower Kennington Lane, in the County of Surrey, Surveyor, for an invention for—"Improvements in the construction of roads or carriage-ways and footpaths." *Provisional protection only.*

MENNONS. 31st December 1867.

3706. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 53, Rue de la Chaussée d'Antin, Paris, in the Empire of France, for an invention for—"Improvements in the mode of and apparatus for combining the vapours of liquid hydrocarbons with oxygen and hydrogen, and burning the mixture as fuel."—*A communication from David Oliver Macomber, a person resident at No.* 16, *Rue Auber, Paris, in the Empire of France.*

Letters Patent sealed.

MENNONS. 31st December 1867.

3707. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 53, Rue de la Chaussée d'Antin, Paris, in the Empire of France, for an invention for—"The manufacture of a vegetable substitute for animal hair from a product not hitherto used for that purpose."—*A communication from Werner Staufen, a person resident at No.* 16, *Rue Auber, Paris, in the Empire of France.* *Letters Patent sealed.*

MENNONS. 31st December 1867.

3708. MARC ANTOINE FRANÇOIS MENNONS, of the firm of Mennons and Telescheff, Home and Foreign Patent Agents, of No. 8, Southampton Buildings, in the County of Middlesex, and 53, Rue de la Chaussée d'Antin, Paris, in the Empire of France, for an invention for—"An improved mode of accelerating the induration of certain descriptions of concrete or artificial stone."—*A communication from Johann Georg Wilhelm Picker, a person resident at Braunschweig, in the Duchy of Brunswick, Wolfenbuttel.* *Letters Patent sealed.*

MESSENGER. 31st December 1867.

3709. THOMAS MESSENGER, Marine Department, London, Chatham and Dovor Railway, Dovor, in the County of Kent, Engineer, for an invention for—"Improvements in the construction of steam-engines and boilers." *Letters Patent sealed.*

MCCULLOCH. 31st December 1867.

3710. GILBERT MCCULLOCH, of Manchester, in the County of Lancaster, for an invention for—"Improvements in thread-polishing machines."

Provisional protection only.

BARNES. 31st December 1867.

3711. WILLIAM BARNES, of the City of Worcester, Commercial Traveller, for an invention for—"Improvements in carriage lamps." *Provisional protection only.*

NOVIKOW. 31st December 1867.

3712. JACQUES NOVIKOW, of Briansk, Orel, in the Empire of Russia, for an invention for—"An improved apparatus for drawing and spinning hemp, flax and other fibrous materials for making ropes and cables."

Complete specification; Letters Patent sealed.

DAGUZAN. 31st December 1867.

3713. VICTOR LEON DAGUZAN, 2, Rue Sainte Appoline, Paris, (Empire of France,) Painter, for an invention for—"Improvements in the construction of paving."

Letters Patent sealed.

BESSEMER. 31st December 1867.

3714. HENRY BESSEMER, of Queen Street Place, Cannon Street, in the City of London, for an invention for—"Improvements in the treatment of crude or cast iron, and in the manufacture of malleable iron and steel." *Letters Patent sealed.*

HILL. 31st December 1867.

3715. CHARLES GREY HILL, of Alfred Street, Nottingham, for an invention for —"Improvements in the preparation of floss silk and in the manufacture of ruches."

Letters Patent sealed.

WILSON. 31st December 1867.

3716. WILLIAM WILSON, of the Town and County of Newcastle, Hat Manufacturer, for an invention for —"Improvements in the manufacture of hats and other felted articles of wearing-apparel, and in machines employed for these purposes."—*The result partly of a communication made to him from abroad by Rudolf Eickemeyer, a person resident at Yonkers, in the State of New York, of the United States of America, and partly of his own invention.* *Letters Patent sealed.*

SMITH. 31st December 1867.

3717. NATHAN SMITH, of the Borough of Kingston-upon-Hull, Joiner, for an invention for—"Improvements in stoves." *Provisional protection only.*

ALLAN. 31st December 1867.

3718. ARCHIBALD ALLAN, of Bower Bridge, in the County of Cumberland, for an invention for—"Improvements in brakes applicable to carriages and other vehicles." *Provisional protection only.*

JOHNSON. 31st December 1867.

3719. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery or apparatus for spinning cotton and other fibrous materials."—*A communication to him from abroad by James Eaton, of Boston, in the United States of America.*

Letters Patent sealed.

CLARK. 31st December 1867.	3720. ALEXANDER MELVILLE CLARK, of 53, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in road-sweeping machines."—*A communication to him from abroad by Jean Tailfer, Machinist, and Charles Léon Blot, Engineer, both of 29, Boulevart St. Martin, Paris.* *Letters Patent sealed.*
TOOTH. 31st December 1867.	3721. ROBERT TOOTH, of Fenchurch Street, in the City of London, Gentleman, for an invention for—"An improved mode of and apparatus for evaporating liquids with a view to obtaining the saccharine, saline or other substances contained therein, in a dry or crystallized state." *Provisional protection only.*
MITCHELL. MITCHELL. 31st December 1867.	3722. WILLIAM MITCHELL, and THOMAS MITCHELL, both of Stackstead, in the County of Lancaster, for an invention for—"Certain improvements in carding-engines to be employed in the process of manufacturing felt carpeting." *Provisional protection only.*
CROMPTON. 31st December 1867.	3723. JAMES GEORGE CROMPTON, of Stockport, in the County of Chester, Leather Manufacturer, for an invention for—"Improvements in mechanism or apparatus to be employed in the manufacture of felt hats." *Letters Patent sealed.*

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PATENT LAW AMENDMENT ACT, 1852.

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